Chapter 2

Summary of Operational Request Tag Elements

This chapter lists the JUNOS Extensible Markup Language (XML) tag elements that a client of the JUNOScript or NETCONF server uses to request operational information. The tag names are in alphabetical order. For information about the notation used in this chapter, see Table 2 on page lxvii.

<abort-in-service-upgrade>

Usage

```
<rpc>
  <abort-in-service-upgrade/>
</rpc>
```

Description Abort in-service software upgrade.

<clear-aaa-subscriber-table>

Usage

```
<rpc>
  <clear-aaa-subscriber-table>
    <username>username</username>     <!-- mandatory -->
  </clear-aaa-subscriber-table>
</rpc>
```

Description Logout the subscriber and clear the session entry.

Contents <username>—Subscriber session identifier.

<clear-aaa-subscriber-table-specific-statistics>

Usage

```
<rpc>
  <clear-aaa-subscriber-table-specific-statistics>
    <username>username</username>     <!-- mandatory -->
  </clear-aaa-subscriber-table-specific-statistics>
</rpc>
```

Description Clear subscriber statistics.

Contents <username>—Subscriber session identifier.

<clear-arp-table>

Usage
```
<rpc>
  <clear-arp-table>
    <hostname>hostname</hostname>
    <vpn>vpn</vpn>
    <logical-system>logical-system</logical-system>
  </clear-arp-table>
</rpc>
```

Description Clear address resolution information.

Contents <hostname>—Name of host.

<logical-system>—Name of logical system.

<vpn>—Name of VPN routing table.

<clear-authentication-pending-table>

Usage
```
<rpc>
  <clear-authentication-pending-table>

<clear-authentication-pending-table-specific>clear-authentication-pending-table-specific
                </clear-authentication-pending-table-specific>
  </clear-authentication-pending-table>
</rpc>
```

Description Clear pending authentication requests.

Contents <clear-authentication-pending-table-specific>—Clear information for a specific request.

<clear-authentication-statistics>

Usage
```
<rpc>
  <clear-authentication-statistics/>
</rpc>
```

Description Clear general authentication statistics.

<clear-binding-all>

Usage
```
<rpc>
  <clear-binding-all/>
</rpc>
```

Description Clear all bindings.

<clear-binding-ip>

Usage

```
<rpc>
  <clear-binding-ip>
    <ip-address>ip-address</ip-address>     <!-- mandatory -->
  </clear-binding-ip>
</rpc>
```

Description Clear binding entry based on IP address.

Contents <ip-address>—Enter IP Address.

<clear-binding-nai>

Usage

```
<rpc>
  <clear-binding-nai>
    <nai>nai</nai>     <!-- mandatory -->
  </clear-binding-nai>
</rpc>
```

Description Clear binding entry based on nai.

Contents <nai>—Enter nai.

<clear-bridge-interface-mac-table>

Usage

```
<rpc>
  <clear-bridge-interface-mac-table>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
    <vlan-id>vlan-id-choice</vlan-id>
  </clear-bridge-interface-mac-table>
</rpc>
```

Description Clear media access control table for specified interface.

Contents <interface-name>—Name of interface for which to clear table.

<vlan-id>—Clear MAC address learned on a specified VLAN.

- all-vlan—Clear MAC addresses on all VLAN(s).
- vlan-id—Clear MAC address learned on a specified VLAN.

<clear-bridge-mac-table>

Usage

```
<rpc>
  <clear-bridge-mac-table>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
    <vlan-id>vlan-id-choice</vlan-id>
    <address>address</address>
  </clear-bridge-mac-table>
</rpc>
```

Description Clear all learned media access control addresses.

Contents <address>—MAC address.

<bridge-domain>—Name of bridging domain, or 'all'.

<instance>—Display information for a specified instance.

<vlan-id>—Clear MAC address learned on a specified VLAN.

- all-vlan—Clear MAC addresses on all VLAN(s).
- vlan-id—Clear MAC address learned on a specified VLAN.

<clear-database-replication-statistics-information>

Usage

```
<rpc>
  <clear-database-replication-statistics-information/>
</rpc>
```

Description Clear database replication statistics.

<clear-dhcp-binding-information>

Usage

```
<rpc>
  <clear-dhcp-binding-information>
    <address>address</address>
  </clear-dhcp-binding-information>
</rpc>
```

Description Clear DHCP client binding information.

Contents <address>—Address of DHCP client binding.

<clear-dhcp-conflict-information>

Usage

```
<rpc>
  <clear-dhcp-conflict-information>
    <address>address</address>
  </clear-dhcp-conflict-information>
</rpc>
```

Description Clear DHCP address conflict.

Contents <address>—DHCP conflict address.

<clear-dhcp-relay-binding-information>

Usage

```
<rpc>
  <clear-dhcp-relay-binding-information>
    <address>address</address>
    <all/>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </clear-dhcp-relay-binding-information>
</rpc>
```

Description Clear DHCP client binding information.

Contents <address>—IP address or MAC address of DHCP client binding.

<all>—Clear all bindings.

<logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<clear-dhcp-relay-statistics-information>

Usage

```
<rpc>
  <clear-dhcp-relay-statistics-information>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </clear-dhcp-relay-statistics-information>
</rpc>
```

Description Clear DHCP statistics.

Contents <logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<clear-dhcp-server-binding-information>

Usage

```
<rpc>
  <clear-dhcp-server-binding-information>
    <address>address</address>
    <all/>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </clear-dhcp-server-binding-information>
</rpc>
```

Description Clear DHCP client binding information.

Contents <address>—IP address or MAC address of DHCP client binding.

<all>—Clear all bindings.

<logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<clear-dhcp-statistics-information>

Usage

```
<rpc>
  <clear-dhcp-statistics-information/>
</rpc>
```

Description Clear DHCP statistics.

<clear-dot1x-interface-session>

Usage

```
<rpc>
  <clear-dot1x-interface-session>
    <interface-name>interface-name</interface-name>
  </clear-dot1x-interface-session>
</rpc>
```

Description Clear 802.1X session on an interface.

Contents <interface-name>—Name of interface.

<clear-dot1x-mac-session>

Usage

```
<rpc>
  <clear-dot1x-mac-session>
    <static-mac-addr>static-mac-addr</static-mac-addr>
  </clear-dot1x-mac-session>
</rpc>
```

Description Clear 802.1X session on a MAC address.

Contents <static-mac-addr>—MAC address to clear.

<clear-helper-statistics-information>

Usage

```
<rpc>
  <clear-helper-statistics-information/>
</rpc>
```

Description Clear helper statistics.

<clear-interfaces-statistics>

Usage

```
<rpc>
  <clear-interfaces-statistics>
    <switch-port>switch-port</switch-port>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </clear-interfaces-statistics>
</rpc>
```

Description Clear interface statistics.

Contents <interface-name>—Name of physical or logical interface.

<switch-port>—Front end port number.

<clear-interfaces-statistics-all>

Usage

```
<rpc>
  <clear-interfaces-statistics-all/>
</rpc>
```

Description Clear statistics for all interfaces.

<clear-ipv6-nd-information>

Usage
```
<rpc>
  <clear-ipv6-nd-information>
    <host>host</host>
  </clear-ipv6-nd-information>
</rpc>
```

Description Clear IPv6 neighbor cache information.

Contents <host>—Name of neighbor.

<clear-node-secret-file>

Usage
```
<rpc>
  <clear-node-secret-file/>
</rpc>
```

Description Delete SecurID authentication node secret file.

<clear-passive-monitoring>

Usage
```
<rpc>
  <clear-passive-monitoring/>
</rpc>
```

Description Clear passive monitoring statistics.

<clear-passive-monitoring-statistics>

Usage
```
<rpc>
  <clear-passive-monitoring-statistics>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </clear-passive-monitoring-statistics>
</rpc>
```

Description Clear statistics.

Contents <interface-name>—Name of monitoring interface, wildcard, or 'all'.

<clear-ppp-statistics-information>

Usage
```
<rpc>
  <clear-ppp-statistics-information>
    <memory/>
  </clear-ppp-statistics-information>
</rpc>
```

Description Clear PPP statistics.

Contents <memory>—Clear PPP process memory statistics.

<clear-reboot>

Usage
```
<rpc>
  <clear-reboot>
    <both-routing-engines/>
  </clear-reboot>
</rpc>
```

Description Clear all pending halt or reboot requests.

Contents <both-routing-engines>—Clear halt or reboot on both Routing Engines.

<clear-server-statistics-information>

Usage
```
<rpc>
  <clear-server-statistics-information>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </clear-server-statistics-information>
</rpc>
```

Description Clear DHCP server statistics.

Contents <logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<clear-service-pgcp-gates>

Usage
```
<rpc>
  <clear-service-pgcp-gates>
    <gateway-name>gateway-name</gateway-name>     <!-- mandatory -->
  </clear-service-pgcp-gates>
</rpc>
```

Description Clear gates table.

Contents <gateway-name>—Gateway name.

<clear-service-pgcp-statistics>

Usage

```
<rpc>
  <clear-service-pgcp-statistics>
    <gateway-name>gateway-name</gateway-name> <!-- mandatory -->
  </clear-service-pgcp-statistics>
</rpc>
```

Description Clear statistics information.

Contents <gateway-name>—Gateway name.

<clear-service-set-packet-drop-statistics>

Usage

```
<rpc>
  <clear-service-set-packet-drop-statistics>
    <interface>interface</interface>
  </clear-service-set-packet-drop-statistics>
</rpc>
```

Description Clear service set packet drop statistics.

Contents <interface>—Name of adaptive services interface.

<clear-service-sfw-flow-table-information>

Usage

```
<rpc>
  <clear-service-sfw-flow-table-information>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <protocol>protocol-choice</protocol>
    <application-protocol>application-protocol-choice</application-protocol>
    <service-set>service-set</service-set>
    <interface>interface</interface>
  </clear-service-sfw-flow-table-information>
</rpc>
```

Description Remove established flows from flow table.

Contents <application-protocol>—Application protocol type to use as filter.

- bootp—Bootstrap protocol.
- dce-rpc—DCE RPC.
- dce-rpc-portmap—DCE RPC portmap.
- dns—Domain Name Service.
- exec—Remote Execution Protocol.
- ftp—File Transfer Protocol.
- h323—H.323.
- icmp—ICMP.
- ignore—Ignore application type.
- iiop—Internet Inter-ORB Protocol.
- ip—IP.
- login—Login.
- mgcp-ca—MGCP-CA.
- mgcp-ua—MGCP-UA.
- ms-rpc—Microsoft RPC.
- netbios—NetBIOS.
- netshow—NetShow.
- pptp—Point-to-Point Tunneling Protocol.

- q931—Q.931.
- ras—RAS.
- realaudio—RealAudio.
- rpc—RPC.
- rpc-portmap—RPC portmap.
- rsh—Remote Shell.
- rtsp—Real Time Streaming Protocol.
- sccp—Skinny Client Control Protocol.
- shell—Shell.
- sip—Session Initiation Protocol.
- snmp—SNMP.
- sqlnet—SQLNet.
- sqlnet-v2—Oracle SQL*Net Version 2.
- sun-rpc—Sun Microsystems RPC.
- talk—Talk Program.
- tftp—Trivial File Transfer Protocol.
- traceroute—Traceroute.
- winframe—WinFrame.

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<interface>—Name of adaptive services interface.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.

- ipip—IP in IP.
- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.
- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<clear-service-sfw-sip-call-information>

Usage

```
<rpc>
  <clear-service-sfw-sip-call-information>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <protocol>protocol-choice</protocol>
    <application-protocol>application-protocol-choice</application-protocol>
    <service-set>service-set</service-set>
    <interface>interface</interface>
  </clear-service-sfw-sip-call-information>
</rpc>
```

Description Remove established SIP calls from flow table.

Contents <application-protocol>—Application protocol type to use as filter.

- bootp—Bootstrap protocol.
- dce-rpc—DCE RPC.
- dce-rpc-portmap—DCE RPC portmap.
- dns—Domain Name Service.
- exec—Remote Execution Protocol.
- ftp—File Transfer Protocol.
- h323—H.323.
- icmp—ICMP.
- ignore—Ignore application type.
- iiop—Internet Inter-ORB Protocol.
- ip—IP.
- login—Login.
- mgcp-ca—MGCP-CA.
- mgcp-ua—MGCP-UA.
- ms-rpc—Microsoft RPC.
- netbios—NetBIOS.
- netshow—NetShow.
- pptp—Point-to-Point Tunneling Protocol.

- q931—Q.931.
- ras—RAS.
- realaudio—RealAudio.
- rpc—RPC.
- rpc-portmap—RPC portmap.
- rsh—Remote Shell.
- rtsp—Real Time Streaming Protocol.
- sccp—Skinny Client Control Protocol.
- shell—Shell.
- sip—Session Initiation Protocol.
- snmp—SNMP.
- sqlnet—SQLNet.
- sqlnet-v2—Oracle SQL*Net Version 2.
- sun-rpc—Sun Microsystems RPC.
- talk—Talk Program.
- tftp—Trivial File Transfer Protocol.
- traceroute—Traceroute.
- winframe—WinFrame.

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<interface>—Name of adaptive services interface.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.

- ipip—IP in IP.
- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.
- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<clear-service-sfw-sip-register-information>

Usage

```
<rpc>
  <clear-service-sfw-sip-register-information>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <protocol>protocol-choice</protocol>
    <application-protocol>application-protocol-choice</application-protocol>
    <service-set>service-set</service-set>
    <interface>interface</interface>
  </clear-service-sfw-sip-register-information>
</rpc>
```

Description Remove established SIP register from flow table.

Contents <application-protocol>—Application protocol type to use as filter.

- bootp—Bootstrap protocol.
- dce-rpc—DCE RPC.
- dce-rpc-portmap—DCE RPC portmap.
- dns—Domain Name Service.
- exec—Remote Execution Protocol.
- ftp—File Transfer Protocol.
- h323—H.323.
- icmp—ICMP.
- ignore—Ignore application type.
- iiop—Internet Inter-ORB Protocol.
- ip—IP.
- login—Login.
- mgcp-ca—MGCP-CA.
- mgcp-ua—MGCP-UA.
- ms-rpc—Microsoft RPC.
- netbios—NetBIOS.
- netshow—NetShow.
- pptp—Point-to-Point Tunneling Protocol.

- q931—Q.931.
- ras—RAS.
- realaudio—RealAudio.
- rpc—RPC.
- rpc-portmap—RPC portmap.
- rsh—Remote Shell.
- rtsp—Real Time Streaming Protocol.
- sccp—Skinny Client Control Protocol.
- shell—Shell.
- sip—Session Initiation Protocol.
- snmp—SNMP.
- sqlnet—SQLNet.
- sqlnet-v2—Oracle SQL*Net Version 2.
- sun-rpc—Sun Microsystems RPC.
- talk—Talk Program.
- tftp—Trivial File Transfer Protocol.
- traceroute—Traceroute.
- winframe—WinFrame.

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<interface>—Name of adaptive services interface.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.

- ipip—IP in IP.
- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.
- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<clear-services-dynamic-flow-capture-criteria>

Usage

```
<rpc>
  <clear-services-dynamic-flow-capture-criteria>
    <capture-group>capture-group</capture-group>     <!-- mandatory -->
    <destination-identifier>destination-identifier</destination-identifier>
    <criteria-identifier>criteria-identifier</criteria-identifier>
    <static/>
  </clear-services-dynamic-flow-capture-criteria>
</rpc>
```

Description Clear dynamic flow capture criteria.

Contents <capture-group>—Capture group name.

<criteria-identifier>—Criteria identifier.

<destination-identifier>—Content destination identifier.

<static>—Clear static criteria also.

<clear-services-dynamic-flow-capture-sequence-number>

Usage
```
<rpc>
  <clear-services-dynamic-flow-capture-sequence-number>
    <capture-group>capture-group</capture-group>     <!-- mandatory -->
    <source-identifier>source-identifier</source-identifier>     <!-- mandatory -->
  </clear-services-dynamic-flow-capture-sequence-number>
</rpc>
```

Description Clear dynamic flow capture sequence-number.

Contents <capture-group>—Capture group name.

<source-identifier>—Control source identifier.

<clear-services-flow-collector-information>

Usage
```
<rpc>
  <clear-services-flow-collector-information/>
</rpc>
```

Description Clear services flow collector information.

<clear-services-flow-collector-statistics>

Usage
```
<rpc>
  <clear-services-flow-collector-statistics>
    <interface>interface-choice</interface>     <!-- mandatory -->
  </clear-services-flow-collector-statistics>
</rpc>
```

Description Clear statistics.

Contents <interface>—Interface name.

- all—All configured Collector PICs.
- interface—Physical interface.

<clear-system-commit>

Usage
```
<rpc>
  <clear-system-commit/>
</rpc>
```

Description Clear all pending commit requests.

<clear-visitor-all>

Usage

```
<rpc>
  <clear-visitor-all/>
</rpc>
```

Description Clear all visitors.

<clear-visitor-ip>

Usage

```
<rpc>
  <clear-visitor-ip>
    <ip-address>ip-address</ip-address>     <!-- mandatory -->
  </clear-visitor-ip>
</rpc>
```

Description Cleat visitor entry based on IP address.

Contents <ip-address>—Enter IP Address.

<clear-visitor-nai>

Usage

```
<rpc>
  <clear-visitor-nai>
    <nai>nai</nai>     <!-- mandatory -->
  </clear-visitor-nai>
</rpc>
```

Description Clear visitor entry based on nai.

Contents <nai>—Enter nai.

<clear-vpls-interface-mac-table>

Usage

```
<rpc>
  <clear-vpls-interface-mac-table>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
    <vlan-id>vlan-id-choice</vlan-id>
  </clear-vpls-interface-mac-table>
</rpc>
```

Description Clear media access control table for specified interface.

Contents <interface-name>—Name of interface for which to clear table.

<vlan-id>—Clear MAC address learned on a specified VLAN.

- all-vlan—Clear MAC addresses on all VLAN(s).
- vlan-id—Clear MAC address learned on a specified VLAN.

<clear-vpls-mac-table>

Usage

```
<rpc>
  <clear-vpls-mac-table>
    <instance>instance</instance>
    <logical-system>logical-system</logical-system>
    <vlan-id>vlan-id-choice</vlan-id>
    <address>address</address>
  </clear-vpls-mac-table>
</rpc>
```

Description Clear all learned media access control addresses.

Contents <address>—MAC address.

<instance>—Display information for a specified instance.

<logical-system>—Name of logical system, or 'all'.

<vlan-id>—Clear MAC address learned on a specified VLAN.

- all-vlan—Clear MAC addresses on all VLAN(s).
- vlan-id—Clear MAC address learned on a specified VLAN.

<file-compare>

Usage

```
<rpc>
  <file-compare>
    <context/>
    <unified/>
    <ignore-white-space/>
    <from-file>from-file</from-file>
    <to-file>to-file</to-file>
  </file-compare>
</rpc>
```

Description Compare files.

Contents <context>—Context style output format.

<from-file>—File to compare.

<ignore-white-space>—Ignore changes in amount of white space.

<to-file>—File to compare against.

<unified>—Unified style output format.

<file-copy>

Usage

```
<rpc>
  <file-copy>
    <source>source</source>      <!-- mandatory -->
    <destination>destination</destination>      <!-- mandatory -->
  </file-copy>
</rpc>
```

Description Copy files (local or remote).

Contents <destination>—URL of destination file.

<source>—URL of source file.

<file-delete>

Usage

```
<rpc>
  <file-delete>
    <purge/>
    <path>path</path>      <!-- mandatory -->
  </file-delete>
</rpc>
```

Description Delete files from the system.

Contents <path>—Path to delete.

<purge>—Overwrite regular files before deleting them.

<file-get>

Usage

```
<rpc>
  <file-get>
    <filename>filename</filename>      <!-- mandatory -->
    <encoding>encoding</encoding>      <!-- mandatory -->
  </file-get>
</rpc>
```

Description Get file from device with contents inlined.

Contents <encoding>—Encoding type, ascii or base64.

<filename>—Name of source file on device.

<file-list>

Usage

```
<rpc>
  <file-list>
    <detail/>
    <recursive/>
    <path>path</path>
  </file-list>
</rpc>
```

Description List file information.

Contents <detail>—Display detailed output (like 'ls -l').

<path>—Path to list.

<recursive>—Descend recursively through directory hierarchy.

<file-put>

Usage

```
<rpc>
  <file-put>
    <filename>filename</filename>      <!-- mandatory -->
    <permission>permission</permission>
    <encoding>encoding</encoding>      <!-- mandatory -->
    <delete-if-exist/>
    <file-contents>file-contents</file-contents>      <!-- mandatory -->
  </file-put>
</rpc>
```

Description Put file onto device with contents inlined.

Contents <delete-if-exist>—Delete the destination file on device if it already exists.

<encoding>—Encoding type, ascii or base64.

<file-contents>—File content.

<filename>—Name of destination file on device.

<permission>—Name of destination file on device.

<file-rename>

Usage

```
<rpc>
  <file-rename>
    <source>source</source>     <!-- mandatory -->
    <destination>destination</destination>     <!-- mandatory -->
  </file-rename>
</rpc>
```

Description Rename files.

Contents <destination>—Destination URL.

<source>—Source URL.

<file-show>

Usage

```
<rpc>
  <file-show>
    <filename>filename</filename>     <!-- mandatory -->
    <encoding>encoding-choice</encoding>
  </file-show>
</rpc>
```

Description Show file contents.

Contents <encoding>—Encode file contents.

- base64—Encode file with base64 encoding.

<filename>—Filename to show.

<get-aaa-module-statistics>

Usage

```
<rpc>
  <get-aaa-module-statistics>
    <authentication/>
    <accounting/>
    <dynamic-requests/>
  </get-aaa-module-statistics>
</rpc>
```

Description Authentication, authorization and accounting (AAA) module statistics.

Contents <accounting>—Accounting statistics.

<authentication>—Authentication statistics.

<dynamic-requests>—Dynamic requests statistics.

<get-aaa-subscriber-statistics>

Usage

```
<rpc>
  <get-aaa-subscriber-statistics>
    <username>username</username> <!-- mandatory -->
  </get-aaa-subscriber-statistics>
</rpc>
```

Description Statistics on subscriber events.

Contents <username>—Show statistics for this subscriber's session entry.

<get-aaa-subscriber-table>

Usage

```
<rpc>
  <get-aaa-subscriber-table>
    <username>username</username>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </get-aaa-subscriber-table>
</rpc>
```

Description List subscriber specific command options.

Contents <logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<username>—Show details for this subscriber's session entry.

<get-accounting-profile-information>

Usage

```
<rpc>
  <get-accounting-profile-information>
    <profile>profile</profile>
  </get-accounting-profile-information>
</rpc>
```

Description Show accounting profile information.

Contents <profile>—Profile name.

<get-accounting-record-information>

Usage

```
<rpc>
  <get-accounting-record-information>
    <profile>profile</profile>     <!-- mandatory -->
    <since>since</since>
    <utc-timestamp/>
  </get-accounting-record-information>
</rpc>
```

Description Show accounting records.

Contents <profile>—Name of profile.

<since>—Timestamp on earliest records to show (YYYY-MM-DD.HH:MM:SS).

<utc-timestamp>—Display timestamp in UTC format.

<get-active-servers>

Usage

```
<rpc>
  <get-active-servers/>
</rpc>
```

Description Show configured servers.

<get-address-assignment-pool-table>

Usage

```
<rpc>
  <get-address-assignment-pool-table>
    <get-address-assignment-pool-table-specific>get-addrs-assgnmnt-pool-table-specific
                </get-address-assignment-pool-table-specific> <!-- mandatory -->
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </get-address-assignment-pool-table>
</rpc>
```

Description Show pool information.

Contents <get-address-assignment-pool-table-specific>—Show information for a specific pool.

<logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<get-alarm-information>

Usage
```
<rpc>
  <get-alarm-information/>
</rpc>
```

Description Show alarm status.

<get-arp-table-information>

Usage
```
<rpc>
  <get-arp-table-information>
    <no-resolve/>
    <expiration-time/>
  </get-arp-table-information>
</rpc>
```

Description Show system Address Resolution Protocol table entries.

Contents <expiration-time>—Show seconds remaining before expiration.

<no-resolve>—Don't attempt to print addresses symbolically.

<get-authentication-pending-table>

Usage
```
<rpc>
  <get-authentication-pending-table>
    <get-authentication-pending-table-detailed/>
    <get-authentication-pending-table-specific>get-auth-pending-tbl-specific
                </get-authentication-pending-table-specific>
  </get-authentication-pending-table>
</rpc>
```

Description Show pending authentication requests.

Contents <get-authentication-pending-table-detailed>—Show the detailed information.

<get-authentication-pending-table-specific>—Show detail information for a specific request.

<get-authentication-statistics>

Usage
```
<rpc>
  <get-authentication-statistics/>
</rpc>
```

Description Show authentication statistics.

<get-authorization-information>

Usage

```
<rpc>
  <get-authorization-information/>
</rpc>
```

Description Show authorization and authentication information.

<get-bfd-session-information>

Usage

```
<rpc>
  <get-bfd-session-information>
    <summary/>
    <brief/>
    <detail/>
    <extensive/>
    <logical-system>logical-system</logical-system>
  </get-bfd-session-information>
</rpc>
```

Description Show all BFD sessions.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<logical-system>—Name of logical system, or 'all'.

<summary>—Display summary output.

<get-bgp-group-information>

Usage

```
<rpc>
  <get-bgp-group-information>
    <logical-system>logical-system</logical-system>
    <summary/>
    <brief/>
    <detail/>
    <instance>instance</instance>
    <group-name>group-name</group-name>
  </get-bgp-group-information>
</rpc>
```

Description Show the BGP group database.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<group-name>—Show group information for a particular group.

<instance>—Show peer information for a particular instance.

<logical-system>—Name of logical system, or 'all'.

<summary>—Display summary output.

<get-bgp-neighbor-information>

Usage

```
<rpc>
  <get-bgp-neighbor-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <neighbor-address>neighbor-address</neighbor-address>
  </get-bgp-neighbor-information>
</rpc>
```

Description Show the BGP neighbor database.

Contents <instance>—Show peer information for a particular instance.

<logical-system>—Name of logical system, or 'all'.

<neighbor-address>—Show the neighbor database for a particular neighbor.

<get-bgp-orf-information>

Usage

```
<rpc>
  <get-bgp-orf-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <instance>instance</instance>
    <neighbor-address>neighbor-address</neighbor-address>
  </get-bgp-orf-information>
</rpc>
```

Description Show outbound route filtering information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<instance>—Show ORF information for a particular instance.

<logical-system>—Name of logical system, or 'all'.

<neighbor-address>—Show ORF information for a particular neighbor.

<get-bgp-rtf-information>

Usage

```
<rpc>
  <get-bgp-rtf-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <group-name>group-name</group-name>
  </get-bgp-rtf-information>
</rpc>
```

Description Show route target filtering information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<group-name>—Show group information for a particular group.

<logical-system>—Name of logical system, or 'all'.

<get-bgp-summary-information>

Usage

```
<rpc>
  <get-bgp-summary-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-bgp-summary-information>
</rpc>
```

Description Show overview of BGP information.

Contents <instance>—Show peer information for a particular instance.

<logical-system>—Name of logical system, or 'all'.

<get-bgp-traffic-statistics-information>

Usage

```
<rpc>
  <get-bgp-traffic-statistics-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <group-name>group-name</group-name>
  </get-bgp-traffic-statistics-information>
</rpc>
```

Description Show packet statistics for labeled BGP routes.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<group-name>—Show group information for a particular group.

<logical-system>—Name of logical system, or 'all'.

<get-bridge-domain-alt-root-flood-route-information>

Usage

```
<rpc>
  <get-bridge-domain-alt-root-flood-route-information>
    <interface>interface</interface>     <!-- mandatory -->
  </get-bridge-domain-alt-root-flood-route-information>
</rpc>
```

Description Show STP alt-root flooding route used for interface.

Contents <interface>—Interface for which to show alternate-root flooding route.

<get-bridge-domain-bd-flood-route-information>

Usage

```
<rpc>
  <get-bridge-domain-bd-flood-route-information>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
  </get-bridge-domain-bd-flood-route-information>
</rpc>
```

Description Show route for flooding traffic of a bridge domain if no-local-switching is not enabled.

Contents <bridge-domain>—Display information for a specified bridge domain.

<instance>—Display information for a specified instance.

<get-bridge-domain-event-queue-information>

Usage

```
<rpc>
  <get-bridge-domain-event-queue-information/>
</rpc>
```

Description Show queue of pending bridge flood events.

<get-bridge-domain-mlp-flood-route-information>

Usage

```
<rpc>
  <get-bridge-domain-mlp-flood-route-information>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
  </get-bridge-domain-mlp-flood-route-information>
</rpc>
```

Description Show route for flooding traffic to MAC learning chips.

Contents <bridge-domain>—Display information for a specified bridge domain.

<instance>—Display information for a specified instance.

<get-bridge-domain-re-flood-route-information>

Usage

```
<rpc>
  <get-bridge-domain-re-flood-route-information>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
  </get-bridge-domain-re-flood-route-information>
</rpc>
```

Description Show route for Routing Engine flooding to all interfaces.

Contents <bridge-domain>—Display information for a specified bridge domain.

<instance>—Display information for a specified instance.

<get-bridge-instance-information>

Usage

```
<rpc>
  <get-bridge-instance-information>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
    <interface>interface</interface>
    <detail/>
    <brief/>
    <extensive/>
  </get-bridge-instance-information>
</rpc>
```

Description Show bridge domain information.

Contents <bridge-domain>—Name of bridging domain, or 'all'.

<brief>—Display brief output.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Display information for a specified instance.

<interface>—Name of interface for which to display table.

<get-bridge-interface-mac-table>

Usage

```
<rpc>
  <get-bridge-interface-mac-table>
    <interface-name>interface-name</interface-name>
    <all/>
    <detail/>
    <brief/>
    <extensive/>
    <count/>
  </get-bridge-interface-mac-table>
</rpc>
```

Description Display MAC table for a specified interface.

Contents <all>—Display MAC table for all the interfaces.

<brief>—Display brief output.

<count>—Display count only.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<interface-name>—Name of interface for which to display table.

<get-bridge-mac-table>

Usage

```
<rpc>
  <get-bridge-mac-table>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
    <vlan-id>vlan-id-choice</vlan-id>
    <address>address</address>
    <detail/>
    <brief/>
    <extensive/>
    <count/>
  </get-bridge-mac-table>
</rpc>
```

Description Show media access control table.

Contents <address>—MAC address.

<bridge-domain>—Name of bridging domain, or 'all'.

<brief>—Display brief output.

<count>—Display count only.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Display information for a specified instance.

<vlan-id>—Display MAC address learned on a specified VLAN.

- all-vlan—Display MAC addresses on all VLAN(s).
- vlan-id—Display MAC address learned on a specified VLAN.

<get-bridge-statistics-information>

Usage

```
<rpc>
  <get-bridge-statistics-information>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
  </get-bridge-statistics-information>
</rpc>
```

Description Show bridge statistics information.

Contents <bridge-domain>—Display information for a specified bridge domain.

<instance>—Display information for a specified instance.

<get-certificates-information>

Usage

```
<rpc>
  <get-certificates-information>
    <brief/>
    <detail/>
    <serial-number>serial-number</serial-number>
  </get-certificates-information>
</rpc>
```

Description Show IPSec digital certificate information.

Contents <brief>—Display brief output.

<detail>—Display detailed output.

<serial-number>—Serial number of certificate.

<get-cfeb-information>

Usage

```
<rpc>
  <get-cfeb-information/>
</rpc>
```

Description Show Compact Forwarding Engine Board status.

<get-chassis-inventory>

Usage

```
<rpc>
  <get-chassis-inventory>
    <detail/>
    <extensive/>
    <models/>
    <clei-models/>
  </get-chassis-inventory>
</rpc>
```

Description Show installed hardware components.

Contents <clei-models>—Display CLEI barcode and model number for orderable FRUs.

<detail>—Include RAM and disk information in output.

<extensive>—Display ID EEPROM information.

<models>—Display serial number and model number for orderable FRUs.

<get-chassis-location>

Usage
```
<rpc>
  <get-chassis-location/>
</rpc>
```

Description Show physical location of chassis.

<get-checksum-information>

Usage
```
<rpc>
  <get-checksum-information>
    <path>path</path>     <!-- mandatory -->
  </get-checksum-information>
</rpc>
```

Description Calculate MD5 checksum of a file.

Contents <path>—Path to filename.

<get-cli-tip>

Usage
```
<rpc>
  <get-cli-tip>
    <number>number</number>
  </get-cli-tip>
</rpc>
```

Description Tip about using the CLI.

Contents <number>—No documentation is available yet.

<get-clock-synchronization-information>

Usage
```
<rpc>
  <get-clock-synchronization-information>
    <extensive/>
  </get-clock-synchronization-information>
</rpc>
```

Description Show clock synchronization information.

Contents <extensive>—Show clock synchronization information in detail.

<get-commit-information>

Usage

```
<rpc>
  <get-commit-information/>
</rpc>
```

Description Show pending commit requests (if any) and commit history.

<get-core-file-information>

Usage

```
<rpc>
  <get-core-file-information>
    <detail/>
    <brief/>
    <core-filename>core-filename</core-filename>     <!-- mandatory -->
  </get-core-file-information>
</rpc>
```

Description Display the stack trace of core file.

Contents <brief>—View details of binary.

<core-filename>—Name of core file.

<detail>—View stack trace with details of binary.

<get-cos-adaptive-shaper-information>

Usage

```
<rpc>
  <get-cos-adaptive-shaper-information>
    <adaptive-shaper-name>adptve-shaper-nm</adaptive-shaper-name>
  </get-cos-adaptive-shaper-information>
</rpc>
```

Description Show trigger types and associated rate for adaptive shaper.

Contents <adaptive-shaper-name>—Name of adaptive shaper.

<get-cos-classifier-information>

Usage

```
<rpc>
  <get-cos-classifier-information>
    <classifier-name>classifier-name</classifier-name>
    <type>type-choice</type>
  </get-cos-classifier-information>
</rpc>
```

Description Show mapping of code point to forwarding class/loss priority.

Contents <classifier-name>—Name of classifier.

<type>—Type of classifier.

- dscp—Differentiated Services code point (DSCP).
- dscp-ipv6—Differentiated Services code point (DSCP) for IPv6.
- exp—MPLS experimental code point.
- ieee-802.1—IEEE-802.1 code point.
- ieee-802.1ad—IEEE-802.1ad (DEI) code point.
- inet-precedence—IPv4 precedence code point.

<get-cos-classifier-table-information>

Usage

```
<rpc>
  <get-cos-classifier-table-information/>
</rpc>
```

Description Show classifier information.

<get-cos-classifier-table-map-information>

Usage

```
<rpc>
  <get-cos-classifier-table-map-information/>
</rpc>
```

Description Show mapping of interfaces to classifiers.

<get-cos-code-point-map-information>

Usage

```
<rpc>
  <get-cos-code-point-map-information>
    <dscp/>
    <dscp-ipv6/>
    <exp/>
    <ieee-802.1/>
    <inet-precedence/>
    <ieee-802.1ad/>
  </get-cos-code-point-map-information>
</rpc>
```

Description Show mapping of symbolic name to code point bit pattern.

Contents <dscp>—Differentiated Services code point (DSCP).

<dscp-ipv6>—Differentiated Services code point (DSCP) for IPv6.

<exp>—MPLS experimental code point.

<ieee-802.1>—IEEE-802.1 code point.

<ieee-802.1ad>—IEEE-802.1ad (DEI) code point.

<inet-precedence>—IPv4 precedence code point.

<get-cos-drop-profile-information>

Usage

```
<rpc>
  <get-cos-drop-profile-information>
    <profile-name>profile-name</profile-name>
  </get-cos-drop-profile-information>
</rpc>
```

Description Show interpolated data points of named drop profile.

Contents <profile-name>—Name of drop profile.

<get-cos-fabric-scheduler-map-information>

Usage

```
<rpc>
  <get-cos-fabric-scheduler-map-information/>
</rpc>
```

Description Show fabric scheduler map information.

<get-cos-forwarding-class-information>

Usage
```
<rpc>
  <get-cos-forwarding-class-information/>
</rpc>
```

Description Show mapping of forwarding class names to queue numbers.

<get-cos-fragmentation-map-information>

Usage
```
<rpc>
  <get-cos-fragmentation-map-information>
    <fragmentation-map-name>fragmentation-map-name</fragmentation-map-name>
  </get-cos-fragmentation-map-information>
</rpc>
```

Description Show mapping of forwarding classes to fragmentation options.

Contents <fragmentation-map-name>—Name of fragmentation map.

<get-cos-fwtab-fabric-scheduler-map-information>

Usage
```
<rpc>
  <get-cos-fwtab-fabric-scheduler-map-information/>
</rpc>
```

Description Show fabric scheduler map.

<get-cos-information>

Usage
```
<rpc>
  <get-cos-information/>
</rpc>
```

Description Show class-of-service (CoS) information.

<get-cos-interface-map-information>

Usage
```
<rpc>
  <get-cos-interface-map-information>
    <interface-name>interface-name</interface-name>
  </get-cos-interface-map-information>
</rpc>
```

Description Show mapping of CoS objects to interfaces.

Contents <interface-name>—Name of interface.

<get-cos-interface-set-map-information>

Usage
```
<rpc>
  <get-cos-interface-set-map-information>
    <interface-set-name>interface-set-name</interface-set-name>
  </get-cos-interface-set-map-information>
</rpc>
```

Description Show mapping of CoS objects to interface-set.

Contents <interface-set-name>—Name of interface-set.

<get-cos-l2tp-session-map-information>

Usage
```
<rpc>
  <get-cos-l2tp-session-map-information>
    <session-id>session-id</session-id>
  </get-cos-l2tp-session-map-information>
</rpc>
```

Description Show mapping of CoS objects to L2TP sessions.

Contents <session-id>—Session Index.

<get-cos-loss-priority-map-information>

Usage
```
<rpc>
  <get-cos-loss-priority-map-information>
    <loss-priority-map-name>loss-priority-map-name</loss-priority-map-name>
    <type>type-choice</type>
  </get-cos-loss-priority-map-information>
</rpc>
```

Description Show mapping of code point to loss priority.

Contents <loss-priority-map-name>—Name of loss priority map.

<type>—No documentation is available yet.

- frame-relay-de—Frame Relay discard eligible code point.

<get-cos-loss-priority-map-table-binding-information>

Usage
```
<rpc>
  <get-cos-loss-priority-map-table-binding-information/>
</rpc>
```

Description Show interface to loss priority map binding.

<get-cos-loss-priority-map-table-information>

Usage
```
<rpc>
  <get-cos-loss-priority-map-table-information/>
</rpc>
```

Description Show loss priority map table.

<get-cos-policer-table-map-information>

Usage
```
<rpc>
  <get-cos-policer-table-map-information/>
</rpc>
```

Description Show policer.

<get-cos-red-information>

Usage
```
<rpc>
  <get-cos-red-information/>
</rpc>
```

Description Show random early detection drop profile.

<get-cos-rewrite-information>

Usage

```
<rpc>
  <get-cos-rewrite-information>
    <rewrite-rule-name>rewrite-rule-name</rewrite-rule-name>
    <type>type-choice</type>
  </get-cos-rewrite-information>
</rpc>
```

Description Show mapping of forwarding class/loss priority to code point.

Contents <rewrite-rule-name>—Name of rewrite rule.

<type>—Type of rewrite rule.

- dscp—Differentiated Services code point (DSCP).
- dscp-ipv6—Differentiated Services code point (DSCP) for IPv6.
- exp—MPLS experimental code point.
- frame-relay-de—Frame relay discard eligible bit code point.
- ieee-802.1—IEEE-802.1 code point.
- ieee-802.1ad—IEEE-802.1ad (DEI) code point.
- inet-precedence—IPv4 precedence code point.

<get-cos-rewrite-table-information>

Usage

```
<rpc>
  <get-cos-rewrite-table-information/>
</rpc>
```

Description Show rewrite information.

<get-cos-rewrite-table-map-information>

Usage

```
<rpc>
  <get-cos-rewrite-table-map-information/>
</rpc>
```

Description Show interface to rewrite rule mapping.

<get-cos-routing-instance-map-information>

Usage
```
<rpc>
  <get-cos-routing-instance-map-information>
    <routing-instance-name>routing-instance-name</routing-instance-name>
  </get-cos-routing-instance-map-information>
</rpc>
```

Description Show mapping of CoS objects to routing instance.

Contents <routing-instance-name>—Name of routing instance.

<get-cos-scheduler-map-information>

Usage
```
<rpc>
  <get-cos-scheduler-map-information>
    <scheduler-map-name>scheduler-map-name</scheduler-map-name>
  </get-cos-scheduler-map-information>
</rpc>
```

Description Show mapping of forwarding classes to schedulers.

Contents <scheduler-map-name>—Name of scheduler map.

<get-cos-scheduler-map-table-information>

Usage
```
<rpc>
  <get-cos-scheduler-map-table-information/>
</rpc>
```

Description Show scheduler map.

<get-cos-shaper-table-map-information>

Usage
```
<rpc>
  <get-cos-shaper-table-map-information/>
</rpc>
```

Description Show shaper.

<get-cos-table-information>

Usage
```
<rpc>
  <get-cos-table-information/>
</rpc>
```

Description Show forwarding table information.

<get-cos-traffic-control-profile-information>

Usage

```
<rpc>
  <get-cos-traffic-control-profile-information>
    <traffic-control-profile-name>traffic-control-profile-name
                  </traffic-control-profile-name>
  </get-cos-traffic-control-profile-information>
</rpc>
```

Description Show traffic control profiles.

Contents <traffic-control-profile-name>—Name of traffic control profile.

<get-cos-translation-table-information>

Usage

```
<rpc>
  <get-cos-translation-table-information/>
</rpc>
```

Description Show translation table information.

<get-cos-translation-table-map-information>

Usage

```
<rpc>
  <get-cos-translation-table-map-information>
    <translation-table-name>translation-table-name</translation-table-name>
    <type>type-choice</type>
  </get-cos-translation-table-map-information>
</rpc>
```

Description Show mapping of code point to code point.

Contents <translation-table-name>—Name of translation table.

<type>—Type of translation table.

- to-dscp-from-dscp—DSCP to DSCP translation table.
- to-dscp-ipv6-from-dscp-ipv6—DSCP IPV6 to DSCP IPV6 translation table.
- to-exp-from-exp—EXP to EXP translation table.
- to-inet-precedence-from-inet-precedence—INET PRECEDENCE to INET PRECEDENCE translation table.

<get-cos-translation-table-mapping-information>

Usage
```
<rpc>
  <get-cos-translation-table-mapping-information/>
</rpc>
```

Description Show mapping of interfaces to translation table.

<get-cos-virtual-channel-group-information>

Usage
```
<rpc>
  <get-cos-virtual-channel-group-information>
    <virtual-channel-group-name>virtual-channel-group-name
                </virtual-channel-group-name>
  </get-cos-virtual-channel-group-information>
</rpc>
```

Description Show virtual channel group information.

Contents <virtual-channel-group-name>—Name of virtual channel group.

<get-cos-virtual-channel-information>

Usage
```
<rpc>
  <get-cos-virtual-channel-information>
    <virtual-channel-name>virtual-channel-name</virtual-channel-name>
  </get-cos-virtual-channel-information>
</rpc>
```

Description Show virtual channel names.

Contents <virtual-channel-name>—Name of virtual channel.

<get-craft-information>

Usage
```
<rpc>
  <get-craft-information/>
</rpc>
```

Description Show craft interface status.

<get-crl-information>

Usage

```
<rpc>
  <get-crl-information>
    <brief/>
    <detail/>
    <crl-name>crl-name</crl-name>
  </get-crl-information>
</rpc>
```

Description Show IPSec digital certificate revocation lists.

Contents <brief>—Display brief output.

<crl-name>—Name of CRL.

<detail>—Display detailed output.

<get-database-replication-statistics-information>

Usage

```
<rpc>
  <get-database-replication-statistics-information/>
</rpc>
```

Description Show database replication statistics.

<get-database-replication-summary-information>

Usage

```
<rpc>
  <get-database-replication-summary-information/>
</rpc>
```

Description Show database replication summary.

<get-destination-class-statistics>

Usage

```
<rpc>
  <get-destination-class-statistics>
    <class-name>class-name</class-name>     <!-- mandatory -->
    <interface-name>interface-name</interface-name>
  </get-destination-class-statistics>
</rpc>
```

Description Show statistics for destination class.

Contents <class-name>—Name of destination class.

<interface-name>—Name of logical interface.

<get-dhcp-binding-information>

Usage
```
<rpc>
  <get-dhcp-binding-information>
    <detail/>
    <address>address</address>
  </get-dhcp-binding-information>
</rpc>
```

Description Show DHCP client binding information.

Contents <address>—Address of DHCP client binding.

<detail>—Display detailed information.

<get-dhcp-conflict-information>

Usage
```
<rpc>
  <get-dhcp-conflict-information/>
</rpc>
```

Description Show DHCP address conflict.

<get-dhcp-global-information>

Usage
```
<rpc>
  <get-dhcp-global-information/>
</rpc>
```

Description Show DHCP global scope information.

<get-dhcp-pool-information>

Usage
```
<rpc>
  <get-dhcp-pool-information>
    <detail/>
    <subnet-address>subnet-address</subnet-address>
  </get-dhcp-pool-information>
</rpc>
```

Description Show DHCP address pool information.

Contents <detail>—Display detailed information.

<subnet-address>—Logical subnet of address pool.

<get-dhcp-relay-binding-information>

Usage

```
<rpc>
  <get-dhcp-relay-binding-information>
    <detail/>
    <address>address</address>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </get-dhcp-relay-binding-information>
</rpc>
```

Description Show DHCP relay client binding information.

Contents <address>—IP address or MAC address of DHCP client binding.

<detail>—Display detailed information.

<logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<get-dhcp-relay-statistics-information>

Usage

```
<rpc>
  <get-dhcp-relay-statistics-information>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </get-dhcp-relay-statistics-information>
</rpc>
```

Description Show DHCP statistics.

Contents <logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<get-dhcp-server-binding-information>

Usage

```
<rpc>
  <get-dhcp-server-binding-information>
    <detail/>
    <address>address</address>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </get-dhcp-server-binding-information>
</rpc>
```

Description Show DHCP server client binding information.

Contents <address>—IP address or MAC address of DHCP client binding.

<detail>—Display detailed information.

<logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<get-dhcp-server-statistics-information>

Usage

```
<rpc>
  <get-dhcp-server-statistics-information>
    <routing-instance>routing-instance</routing-instance>
    <logical-system>logical-system</logical-system>
  </get-dhcp-server-statistics-information>
</rpc>
```

Description Show DHCP server statistics.

Contents <logical-system>—Name of logical system.

<routing-instance>—Name of routing instance.

<get-dhcp-statistics-information>

Usage

```
<rpc>
  <get-dhcp-statistics-information/>
</rpc>
```

Description Show DHCP statistics.

<get-directory-usage-information>

Usage

```
<rpc>
  <get-directory-usage-information>
    <path>path</path>
    <depth>depth</depth>
  </get-directory-usage-information>
</rpc>
```

Description Show local directory information.

Contents <depth>—Depth of directories to traverse.

<path>—Path of root directory to traverse.

<get-dot1x-authentication-failed-users>

Usage

```
<rpc>
  <get-dot1x-authentication-failed-users/>
</rpc>
```

Description List users who have failed 802.1X authentication.

<get-dot1x-interface-information>

Usage

```
<rpc>
  <get-dot1x-interface-information>
    <brief/>
    <detail/>
    <interface-name>interface-name</interface-name>
  </get-dot1x-interface-information>
</rpc>
```

Description Show 802.1X interface information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<interface-name>—Name of interface.

<get-dot1x-interface-mac-addresses>

Usage
```
<rpc>
  <get-dot1x-interface-mac-addresses>
    <interface-name>interface-name</interface-name>
  </get-dot1x-interface-mac-addresses>
</rpc>
```

Description Show 802.1X static MAC addresses on this interface.

Contents <interface-name>—Show static MAC addresses of interface.

<get-dot1x-static-mac-addresess>

Usage
```
<rpc>
  <get-dot1x-static-mac-addresess/>
</rpc>
```

Description Show 802.1X static MAC addresses.

<get-dvmrp-interfaces-information>

Usage
```
<rpc>
  <get-dvmrp-interfaces-information>
    <logical-system>logical-system</logical-system>
  </get-dvmrp-interfaces-information>
</rpc>
```

Description Show DVMRP interfaces.

Contents <logical-system>—Name of logical system, or 'all'.

<get-dvmrp-neighbors-information>

Usage
```
<rpc>
  <get-dvmrp-neighbors-information>
    <logical-system>logical-system</logical-system>
  </get-dvmrp-neighbors-information>
</rpc>
```

Description Show DVMRP neighbors.

Contents <logical-system>—Name of logical system, or 'all'.

<get-dvmrp-prefix-information>

Usage

```
<rpc>
  <get-dvmrp-prefix-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <prefix>prefix</prefix>
  </get-dvmrp-prefix-information>
</rpc>
```

Description Show DVMRP prefixes.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<prefix>—DVMRP prefix.

<get-dvmrp-prunes-information>

Usage

```
<rpc>
  <get-dvmrp-prunes-information>
    <logical-system>logical-system</logical-system>
    <all/>
    <rx/>
    <tx/>
  </get-dvmrp-prunes-information>
</rpc>
```

Description Show DVMRP prunes.

Contents <all>—Display both received and transmitted prunes.

<logical-system>—Name of logical system, or 'all'.

<rx>—Display received prunes.

<tx>—Display transmitted prunes.

<get-environment-cb-information>

Usage
```
<rpc>
  <get-environment-cb-information>
    <slot>slot</slot>
  </get-environment-cb-information>
</rpc>
```

Description Show Control Board information.

Contents <slot>—CB slot number.

<get-environment-feb-information>

Usage
```
<rpc>
  <get-environment-feb-information>
    <slot>slot</slot>
  </get-environment-feb-information>
</rpc>
```

Description Show Forwarding Engine Board information.

Contents <slot>—FEB slot number.

<get-environment-fpc-information>

Usage
```
<rpc>
  <get-environment-fpc-information>
    <fpc-slot>fpc-slot</fpc-slot>
  </get-environment-fpc-information>
</rpc>
```

Description Show Flexible PIC Concentrator information.

Contents <fpc-slot>—FPC slot number.

<get-environment-fpm-information>

Usage
```
<rpc>
  <get-environment-fpm-information/>
</rpc>
```

Description Show craft interface information.

<get-environment-information>

Usage
```
<rpc>
  <get-environment-information/>
</rpc>
```

Description Show component status and temperature, cooling system speeds.

<get-environment-mcs-information>

Usage
```
<rpc>
  <get-environment-mcs-information>
    <slot>slot</slot>
  </get-environment-mcs-information>
</rpc>
```

Description Show Miscellaneous Control Subsystem information.

Contents <slot>—MCS slot number.

<get-environment-pcg-information>

Usage
```
<rpc>
  <get-environment-pcg-information>
    <slot>slot</slot>
  </get-environment-pcg-information>
</rpc>
```

Description Show Packet Forwarding Engine Clock Generator information.

Contents <slot>—PCG slot number.

<get-environment-pem-information>

Usage
```
<rpc>
  <get-environment-pem-information>
    <slot>slot</slot>
  </get-environment-pem-information>
</rpc>
```

Description Show Power Entry Module information.

Contents <slot>—PEM slot number.

<get-environment-psu-information>

Usage
```
<rpc>
  <get-environment-psu-information>
    <slot>slot</slot>
  </get-environment-psu-information>
</rpc>
```

Description Show Power Supply Unit information.

Contents <slot>—PSU slot number.

<get-environment-re-information>

Usage
```
<rpc>
  <get-environment-re-information>
    <slot>slot</slot>
  </get-environment-re-information>
</rpc>
```

Description Show Routing Engine information.

Contents <slot>—Routing Engine slot number.

<get-environment-scg-information>

Usage
```
<rpc>
  <get-environment-scg-information>
    <slot>slot</slot>
  </get-environment-scg-information>
</rpc>
```

Description Show SONET Clock Generator information.

Contents <slot>—SCG slot number.

<get-environment-sfm-information>

Usage
```
<rpc>
  <get-environment-sfm-information>
    <sfm_plane>sfm_plane</sfm_plane>
  </get-environment-sfm-information>
</rpc>
```

Description Show Switching and Forwarding Module information.

Contents <sfm_plane>—SFM slot number.

<get-environment-sib-information>

Usage

```
<rpc>
  <get-environment-sib-information>
    <sib-slot>sib-slot</sib-slot>
  </get-environment-sib-information>
</rpc>
```

Description Show Switch Interface Board information.

Contents <sib-slot>—SIB slot number.

<get-esis-adjacency-information>

Usage

```
<rpc>
  <get-esis-adjacency-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <esis-neighbor-id>esis-neighbor-id</esis-neighbor-id>
  </get-esis-adjacency-information>
</rpc>
```

Description Show ES-IS adjacency database.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<esis-neighbor-id>—NSAP/NET of end system.

<extensive>—Display extensive output.

<instance>—Name of ES-IS instance.

<logical-system>—Name of logical system, or 'all'.

<get-esis-interface-information>

Usage

```
<rpc>
  <get-esis-interface-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <interface-name>interface-name</interface-name>
  </get-esis-interface-information>
</rpc>
```

Description Show ES-IS interface information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of ES-IS instance.

<interface-name>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-esis-statistics-information>

Usage

```
<rpc>
  <get-esis-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-esis-statistics-information>
</rpc>
```

Description Show ES-IS performance statistics.

Contents <instance>—Name of ES-IS instance.

<logical-system>—Name of logical system, or 'all'.

<get-event-summary>

Usage

```
<rpc>
  <get-event-summary>
    <syslogfile>syslogfile</syslogfile>
    <event-id>event-id</event-id>
    <daemon-name>daemon-name</daemon-name>
    <event-description>event-description</event-description>
    <start-time>start-time</start-time>
    <end-time>end-time</end-time>
    <total-message-display>total-message-display</total-message-display>
    <show-start-event>show-start-event</show-start-event>
    <show-end-event>show-end-event</show-end-event>
    <new-search/>
    <output-file-name>output-file-name</output-file-name>
  </get-event-summary>
</rpc>
```

Description Show syslog event.

Contents <daemon-name>—Daemon name filter.

<end-time>—End time filter. Format is mm/dd/yyyy hour:min.

<event-description>—Regular expression for description filter .

<event-id>—Event Id filter.

<new-search>—It is a new search.

<output-file-name>—File name where filtered messages are stored.

<show-end-event>—Requested event ending number.

<show-start-event>—Requested event starting number.

<start-time>—Start time filter. Format is mm/dd/yyyy hour:min.

<syslogfile>—Syslog file name filter.

<total-message-display>—Number of messages displayed per page.

<get-fabric-queue-information>

Usage
```
<rpc>
  <get-fabric-queue-information>
    <destination>destination</destination>
    <source>source</source>
    <summary/>
  </get-fabric-queue-information>
</rpc>
```

Description Show fabric queue statistics.

Contents <destination>—Destination FPC for which to show details.

<source>—Source FPC for which to show details.

<summary>—Display summary output.

<get-feb-brief-information>

Usage
```
<rpc>
  <get-feb-brief-information/>
</rpc>
```

Description Show Forwarding Engine Board status.

<get-feb-information>

Usage
```
<rpc>
  <get-feb-information>
    <feb_slot>feb_slot</feb_slot>
  </get-feb-information>
</rpc>
```

Description Show detailed output.

Contents <feb_slot>—FEB slot number.

<get-feb-redundancy-error-information>

Usage
```
<rpc>
  <get-feb-redundancy-error-information/>
</rpc>
```

Description Show error information.

<get-feb-redundancy-group-information>

Usage

```
<rpc>
  <get-feb-redundancy-group-information>
    <group>group</group>     <!-- mandatory -->
    <errors/>
  </get-feb-redundancy-group-information>
</rpc>
```

Description Show FEB redundancy group information.

Contents <errors>—Include error information.

<group>—Name of FEB redundancy group.

<get-feb-redundancy-information>

Usage

```
<rpc>
  <get-feb-redundancy-information/>
</rpc>
```

Description Show Forwarding Engine Board redundancy information.

<get-fips-pic-status-information>

Usage

```
<rpc>
  <get-fips-pic-status-information/>
</rpc>
```

Description Show FIPS PIC authorization status.

<get-firewall-counter-information>

Usage

```
<rpc>
  <get-firewall-counter-information>
    <countername>countername</countername>     <!-- mandatory -->
    <filter>filter</filter>     <!-- mandatory -->
    <logical-system>logical-system</logical-system>
  </get-firewall-counter-information>
</rpc>
```

Description Counter name.

Contents <countername>—Counter name.

<filter>—Filter name.

<logical-system>—Name of logical system, or 'all'.

<get-firewall-filter-information>

Usage

```
<rpc>
  <get-firewall-filter-information>
    <filtername>filtername</filtername>     <!-- mandatory -->
    <counter>counter</counter>
    <logical-system>logical-system</logical-system>
  </get-firewall-filter-information>
</rpc>
```

Description Filter name.

Contents <counter>—Counter name.

<filtername>—Filter name.

<logical-system>—Name of logical system, or 'all'.

<get-firewall-information>

Usage

```
<rpc>
  <get-firewall-information>
    <logical-system>logical-system</logical-system>
  </get-firewall-information>
</rpc>
```

Description Show firewall information.

Contents <logical-system>—Name of logical system, or 'all'.

<get-firewall-log-information>

Usage

```
<rpc>
  <get-firewall-log-information>
    <get-firewall-log-detailed-information/>
    <interface>interface</interface>
    <logical-system>logical-system</logical-system>
  </get-firewall-log-information>
</rpc>
```

Description Show log entries for firewall activity.

Contents <get-firewall-log-detailed-information>—Display detailed output.

<interface>—Interface name.

<logical-system>—Name of logical system, or 'all'.

<get-firewall-prefix-action-information>

Usage

```
<rpc>
  <get-firewall-prefix-action-information>
    <filter>filter</filter>     <!-- mandatory -->
    <prefix-action>prefix-action</prefix-action>     <!-- mandatory -->
    <from>from</from>
    <to>to</to>
    <logical-system>logical-system</logical-system>
  </get-firewall-prefix-action-information>
</rpc>
```

Description Show prefix-action statistics for a filter.

Contents <filter>—Filter name.

<from>—Starting counter or policer.

<logical-system>—Name of logical system, or 'all'.

<prefix-action>—Prefix-action name.

<to>—Ending counter or policer.

<get-firmware-information>

Usage

```
<rpc>
  <get-firmware-information/>
</rpc>
```

Description Show firmware and operating system version for components.

<get-flow-table-statistics-information>

Usage

```
<rpc>
  <get-flow-table-statistics-information>
    <detail/>
  </get-flow-table-statistics-information>
</rpc>
```

Description Show flow table statistics.

Contents <detail>—Show detailed statistics information.

<get-fm-fpc-state-information>

Usage

```
<rpc>
  <get-fm-fpc-state-information/>
</rpc>
```

Description Show summary fabric management FPC state from Routing Engine.

<get-fm-plane-state-information>

Usage
```
<rpc>
  <get-fm-plane-state-information/>
</rpc>
```

Description Show state of fabric management plane.

<get-fm-sib-state-information>

Usage
```
<rpc>
  <get-fm-sib-state-information/>
</rpc>
```

Description Show summary fabric management SIB state from Routing Engine.

<get-fm-state-information>

Usage
```
<rpc>
  <get-fm-state-information/>
</rpc>
```

Description Show summary fabric management state.

<get-forwarding-table-information>

Usage

```
<rpc>
  <get-forwarding-table-information>
    <detail/>
    <extensive/>
    <multicast/>
    <family>family-choice</family>
    <vpn>vpn</vpn>
    <table>table</table>
    <bridge-domain>bridge-domain</bridge-domain>
    <summary/>
    <matching>matching</matching>
    <destination>destination</destination>
    <learning-vlan-id>learning-vlan-id</learning-vlan-id>
    <label>label</label>
    <ccc>ccc</ccc>
  </get-forwarding-table-information>
</rpc>
```

Description Show entries in all forwarding tables.

Contents <bridge-domain>—Name of bridging domain.

<ccc>—Circuit cross-connect interface name for entries to match.

<destination>—Destination prefix.

<detail>—Display all routes.

<extensive>—Display extensive information about routes.

<family>—Name of family.

- bridge—Bridge (Layer 2 switching).
- ethernet-switching—Switch forwarding table.
- inet—IP version 4 (IPv4).
- inet6—IP version 6 (IPv6).
- iso—International Standards Organization protocol.
- mpls—Multiprotocol Label Switching.
- tnp—Trivial Network Protocol.
- unix—UNIX.
- vlan-classification—VLAN classification table.
- vpls—Virtual private LAN service.

<label>—Label for entries to match.

<learning-vlan-id>—Learning VLAN.

<matching>—IP prefix and length for entries to match.

<multicast>—Display multicast routes.

<summary>—Display count of routes instead of details.

<table>—Name of routing table.

<vpn>—Name of VPN.

<get-fpc-feb-connectivity-information>

Usage

```
<rpc>
  <get-fpc-feb-connectivity-information/>
</rpc>
```

Description Show connectivity between Flexible PIC Concentrators and Forwarding Engine boards.

<get-fpc-information>

Usage

```
<rpc>
  <get-fpc-information>
    <detail/>
    <fpc-slot>fpc-slot</fpc-slot>
  </get-fpc-information>
</rpc>
```

Description Show Flexible PIC Concentrator status.

Contents <detail>—Display detailed output.

<fpc-slot>—FPC slot number.

<get-fru-information>

Usage

```
<rpc>
  <get-fru-information/>
</rpc>
```

Description Show Line Card Chassis (LCC) status.

<get-fwdd-information>

Usage
```
<rpc>
  <get-fwdd-information/>
</rpc>
```

Description Show forwarding process (fwdd) status.

<get-ggsn-apn-statistics-information>

Usage
```
<rpc>
  <get-ggsn-apn-statistics-information>
    <apn-name>apn-name</apn-name>
  </get-ggsn-apn-statistics-information>
</rpc>
```

Description Show access point name statistics.

Contents <apn-name>—Name of APN.

<get-ggsn-charging-statistics-information>

Usage
```
<rpc>
  <get-ggsn-charging-statistics-information/>
</rpc>
```

Description Show charging statistics.

<get-ggsn-gtp-prime-statistics-information>

Usage
```
<rpc>
  <get-ggsn-gtp-prime-statistics-information/>
</rpc>
```

Description Show GPRS Tunneling Protocol Prime statistics.

<get-ggsn-gtp-statistics-information>

Usage
```
<rpc>
  <get-ggsn-gtp-statistics-information/>
</rpc>
```

Description Show GPRS tunneling protocol statistics.

<get-ggsn-imsi-trace>

Usage
```
<rpc>
  <get-ggsn-imsi-trace>
    <imsi-identifier>imsi-identifier</imsi-identifier>     <!-- mandatory -->
  </get-ggsn-imsi-trace>
</rpc>
```

Description Show trace information for Identifier for International Mobile Subscriber Identity.

Contents <imsi-identifier>—Identifier for IMSI.

<get-ggsn-imsi-user-information>

Usage
```
<rpc>
  <get-ggsn-imsi-user-information>
    <imsi-identifier>imsi-identifier</imsi-identifier>     <!-- mandatory -->
  </get-ggsn-imsi-user-information>
</rpc>
```

Description Show International Mobile Subscriber Identity statistics.

Contents <imsi-identifier>—Identifier for IMSI.

<get-ggsn-interface-information>

Usage
```
<rpc>
  <get-ggsn-interface-information/>
</rpc>
```

Description Show GGSN operational status information.

<get-ggsn-l2tp-tunnel-statistics-information>

Usage
```
<rpc>
  <get-ggsn-l2tp-tunnel-statistics-information>
    <lac-address>lac-address</lac-address>
  </get-ggsn-l2tp-tunnel-statistics-information>
</rpc>
```

Description Show L2TP tunnel statistics.

Contents <lac-address>—IP address of LAC.

<get-ggsn-msisdn-trace>

Usage
```
<rpc>
  <get-ggsn-msisdn-trace>
    <msisdn-identifier>msisdn-identifier</msisdn-identifier>     <!-- mandatory -->
  </get-ggsn-msisdn-trace>
</rpc>
```

Description Show trace information for Mobile Station Integrated Services Digital Network.

Contents <msisdn-identifier>—Identifier for MSISDN.

<get-ggsn-radius-statistics-information>

Usage
```
<rpc>
  <get-ggsn-radius-statistics-information/>
</rpc>
```

Description Show RADIUS statistics.

<get-ggsn-sgsn-statistics-information>

Usage
```
<rpc>
  <get-ggsn-sgsn-statistics-information>
    <address>address</address>
  </get-ggsn-sgsn-statistics-information>
</rpc>
```

Description Show statistics for client Serving GPRS Support Node.

Contents <address>—IP address and optional prefix length of SGSN.

<get-ggsn-statistics>

Usage
```
<rpc>
  <get-ggsn-statistics/>
</rpc>
```

Description Show GGSN statistics.

<get-ggsn-trace>

Usage
```
<rpc>
  <get-ggsn-trace/>
</rpc>
```

Description Show all trace information.

<get-header-redirect-set-statistics-information>

Usage
```
<rpc>
  <get-header-redirect-set-statistics-information>
    <detail/>
  </get-header-redirect-set-statistics-information>
</rpc>
```

Description Show header redirect set statistics.

Contents <detail>—Display detailed statistics.

<get-health-monitor-alarm-information>

Usage
```
<rpc>
  <get-health-monitor-alarm-information>
    <brief/>
    <detail/>
  </get-health-monitor-alarm-information>
</rpc>
```

Description Show health-monitor alarms.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<get-health-monitor-information>

Usage
```
<rpc>
  <get-health-monitor-information/>
</rpc>
```

Description Show health-monitoring information.

<get-health-monitor-log-information>

Usage
```
<rpc>
  <get-health-monitor-log-information/>
</rpc>
```

Description Show health-monitoring logs.

<get-helper-statistics-information>

Usage
```
<rpc>
  <get-helper-statistics-information/>
</rpc>
```

Description Show helper statistics.

<get-history-results>

Usage
```
<rpc>
  <get-history-results>
    <brief/>
    <detail/>
    <owner>owner</owner>
    <test>test</test>
    <since>since</since>
  </get-history-results>
</rpc>
```

Description Show history results.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<owner>—Name of owner.

<since>—Show history since YYYY-MM-DD.HH:MM:SS.

<test>—Name of test.

<get-igmp-group-information>

Usage
```
<rpc>
  <get-igmp-group-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <group-name>group-name</group-name>
  </get-igmp-group-information>
</rpc>
```

Description Show IGMP group members.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<group-name>—Name of group.

<logical-system>—Name of logical system, or 'all'.

<get-igmp-interface-information>

Usage

```
<rpc>
  <get-igmp-interface-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <interface-name>interface-name</interface-name>
  </get-igmp-interface-information>
</rpc>
```

Description Show IGMP interfaces.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<interface-name>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-igmp-snooping-interface-information>

Usage

```
<rpc>
  <get-igmp-snooping-interface-information>
    <brief/>
    <detail/>
    <interface>interface</interface>
    <vlan-id>vlan-id</vlan-id>
    <instance>instance</instance>
  </get-igmp-snooping-interface-information>
</rpc>
```

Description Show IGMP snooping interfaces.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<instance>—Name of routing-instance.

<interface>—Name of interface.

<vlan-id>—VLAN ID for a learning domain.

<get-igmp-snooping-membership-information>

Usage

```
<rpc>
  <get-igmp-snooping-membership-information>
    <brief/>
    <detail/>
    <group>group</group>
    <interface>interface</interface>
    <vlan-id>vlan-id</vlan-id>
    <instance>instance</instance>
  </get-igmp-snooping-membership-information>
</rpc>
```

Description Show IGMP snooping group membership.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<group>—IP address range for group.

<instance>—Name of routing-instance.

<interface>—Name of interface.

<vlan-id>—VLAN ID for a learning domain.

<get-igmp-snooping-statistics-information>

Usage

```
<rpc>
  <get-igmp-snooping-statistics-information>
    <interface>interface</interface>
    <vlan-id>vlan-id</vlan-id>
    <instance>instance</instance>
  </get-igmp-snooping-statistics-information>
</rpc>
```

Description Show IGMP snooping statistics.

Contents <instance>—Name of routing-instance.

<interface>—Name of interface.

<vlan-id>—VLAN ID for a learning domain.

<get-igmp-statistics-information>

Usage

```
<rpc>
  <get-igmp-statistics-information>
    <logical-system>logical-system</logical-system>
    <interface>interface</interface>
  </get-igmp-statistics-information>
</rpc>
```

Description Show IGMP statistics.

Contents <interface>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-ike-security-associations-information>

Usage

```
<rpc>
  <get-ike-security-associations-information>
    <brief/>
    <detail/>
    <peer-address>peer-address</peer-address>
  </get-ike-security-associations-information>
</rpc>
```

Description Show IKE security association information.

Contents <brief>—Show brief output (default).

<detail>—Show detailed output.

<peer-address>—Name of security association.

<get-ike-services-security-associations-information>

Usage

```
<rpc>
  <get-ike-services-security-associations-information>
    <brief/>
    <detail/>
    <peer-address>peer-address</peer-address>
  </get-ike-services-security-associations-information>
</rpc>
```

Description Show services IKE security association information.

Contents <brief>—Show brief output (default).

<detail>—Show detailed output.

<peer-address>—Name of security association.

<get-instance-information>

Usage

```
<rpc>
  <get-instance-information>
    <logical-system>logical-system</logical-system>
    <summary/>
    <brief/>
    <detail/>
    <instance-name>instance-name</instance-name>
  </get-instance-information>
</rpc>
```

Description Show routing instances information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<instance-name>—Particular instance name.

<logical-system>—Name of logical system, or 'all'.

<summary>—Display summary output.

<get-interface-filter-information>

Usage

```
<rpc>
  <get-interface-filter-information>
    <interface-name>interface-name</interface-name>
  </get-interface-filter-information>
</rpc>
```

Description Show interface filters information.

Contents <interface-name>—Name of physical or logical interface.

<get-interface-information>

Usage

```
<rpc>
  <get-interface-information>
    <routing-instance>routing-instance-choice</routing-instance>
    <extensive/>
    <statistics/>
    <media/>
    <detail/>
    <terse/>
    <brief/>
    <descriptions/>
    <snmp-index>snmp-index</snmp-index>
    <switch-port>switch-port</switch-port>
    <interface-name>interface-name</interface-name>
  </get-interface-information>
</rpc>
```

Description Show interface information.

Contents

<brief>—Display brief output.

<descriptions>—Display interface description strings.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<interface-name>—Name of physical or logical interface.

<media>—Display media information.

<routing-instance>—Name of routing instance.

- all—All instances.
- instance-name—Instance name.

<snmp-index>—SNMP index of interface.

<statistics>—Display statistics and detailed output.

<switch-port>—Front end port number.

<terse>—Display terse output.

<get-interface-location-information>

Usage

```
<rpc>
  <get-interface-location-information>
    <lcc>lcc</lcc>     <!-- mandatory -->
    <fpc>fpc</fpc>     <!-- mandatory -->
  </get-interface-location-information>
</rpc>
```

Description Show interface name given location.

Contents <fpc>—FPC number.

<lcc>—LCC number.

<get-interface-location-name-information>

Usage

```
<rpc>
  <get-interface-location-name-information>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </get-interface-location-name-information>
</rpc>
```

Description Show physical location given interface name.

Contents <interface-name>—Interface name.

<get-interface-optics-diagnostics-information>

Usage

```
<rpc>
  <get-interface-optics-diagnostics-information>
    <interface-name>interface-name</interface-name>
  </get-interface-optics-diagnostics-information>
</rpc>
```

Description Show interface optics-diagnostics information.

Contents <interface-name>—Name of physical interface.

<get-interface-policer-information>

Usage

```
<rpc>
  <get-interface-policer-information>
    <interface-name>interface-name</interface-name>
  </get-interface-policer-information>
</rpc>
```

Description Show interface policers information.

Contents <interface-name>—Name of physical or logical interface.

<get-interface-queue-information>

Usage

```
<rpc>
  <get-interface-queue-information>
    <forwarding-class>forwarding-class</forwarding-class>
    <ingress/>
    <egress/>
    <both-ingress-egress/>
    <aggregate/>
    <remaining-traffic/>
    <interface-name>interface-name</interface-name>
  </get-interface-queue-information>
</rpc>
```

Description Show queue statistics for this interface.

Contents <aggregate>—Display aggregate queue statistics.

<both-ingress-egress>—Display both ingress and egress queue statistics.

<egress>—Display egress queue statistics.

<forwarding-class>—Name of forwarding class.

<ingress>—Display ingress queue statistics.

<interface-name>—Name of physical interface.

<remaining-traffic>—Display remaining-traffic queue statistics.

<get-interface-set-queue-information>

Usage

```
<rpc>
  <get-interface-set-queue-information>
    <forwarding-class>forwarding-class</forwarding-class>
    <ingress/>
    <egress/>
    <both-ingress-egress/>
    <aggregate/>
    <remaining-traffic/>
    <interface-set-name>interface-set-name</interface-set-name>
  </get-interface-set-queue-information>
</rpc>
```

Description Show queue statistics for this interface-set.

Contents <aggregate>—Display aggregate queue statistics.

<both-ingress-egress>—Display both ingress and egress queue statistics.

<egress>—Display egress queue statistics.

<forwarding-class>—Name of forwarding class.

<ingress>—Display ingress queue statistics.

<interface-set-name>—Name of interface set.

<remaining-traffic>—Display remaining-traffic queue statistics.

<get-ioc-npc-connectivity-information>

Usage

```
<rpc>
  <get-ioc-npc-connectivity-information/>
</rpc>
```

Description Show connectivity between IOC and NPC.

<get-ip-mip-binding-information>

Usage

```
<rpc>
  <get-ip-mip-binding-information>
    <ip-address>ip-address</ip-address>     <!-- mandatory -->
  </get-ip-mip-binding-information>
</rpc>
```

Description Show binding detail based on IP address.

Contents <ip-address>—Show binding detail based on IP address.

<get-ipsec-pic-redundancy-information>

Usage
```
<rpc>
  <get-ipsec-pic-redundancy-information>
    <interface-name>interface-name</interface-name>
  </get-ipsec-pic-redundancy-information>
</rpc>
```

Description Show ES PIC redundancy information.

Contents <interface-name>—Name of ES interface.

<get-ipsec-tunnel-redundancy-information>

Usage
```
<rpc>
  <get-ipsec-tunnel-redundancy-information>
    <security-association-name>security-association-name
                </security-association-name>
  </get-ipsec-tunnel-redundancy-information>
</rpc>
```

Description Show remote tunnel redundancy information.

Contents <security-association-name>—Name of security association.

<get-ipv6-nd-information>

Usage
```
<rpc>
  <get-ipv6-nd-information/>
</rpc>
```

Description Show IPv6 neighbor cache information.

<get-ipv6-ra-information>

Usage

```
<rpc>
  <get-ipv6-ra-information>
    <logical-system>logical-system</logical-system>
    <interface>interface</interface>
    <conflicts/>
    <prefix>prefix</prefix>
    <virtual-router/>
  </get-ipv6-ra-information>
</rpc>
```

Description Show IPv6 router advertisement information.

Contents <conflicts>—Display conflicting information.

<interface>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<prefix>—Prefix and optional prefix length.

<virtual-router>—Display only virtual-interface information.

<get-isis-adjacency-information>

Usage

```
<rpc>
  <get-isis-adjacency-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <system-id>system-id</system-id>
  </get-isis-adjacency-information>
</rpc>
```

Description Show IS-IS adjacency database.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of IS-IS instance.

<logical-system>—Name of logical system, or 'all'.

<system-id>—System ID of intermediate system.

<get-isis-authentication-information>

Usage

```
<rpc>
  <get-isis-authentication-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-isis-authentication-information>
</rpc>
```

Description Show IS-IS authentication information.

Contents <instance>—Name of IS-IS instance.

<logical-system>—Name of logical system, or 'all'.

<get-isis-database-information>

Usage

```
<rpc>
  <get-isis-database-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <level>level</level>
    <system-id>system-id</system-id>
  </get-isis-database-information>
</rpc>
```

Description Show IS-IS link-state database.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of IS-IS instance.

<level>—Number of IS-IS level.

<logical-system>—Name of logical system, or 'all'.

<system-id>—System ID of IS.

<get-isis-hostname-information>

Usage

```
<rpc>
  <get-isis-hostname-information>
    <logical-system>logical-system</logical-system>
  </get-isis-hostname-information>
</rpc>
```

Description Show IS-IS hostname database.

Contents <logical-system>—Name of logical system, or 'all'.

<get-isis-interface-information>

Usage

```
<rpc>
  <get-isis-interface-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <interface-name>interface-name</interface-name>
  </get-isis-interface-information>
</rpc>
```

Description Show IS-IS interface information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of IS-IS instance.

<interface-name>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-isis-overview-information>

Usage

```
<rpc>
  <get-isis-overview-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-isis-overview-information>
</rpc>
```

Description Show overview of IS-IS information.

Contents <instance>—Name of IS-IS instance.

<logical-system>—Name of logical system, or 'all'.

<get-isis-route-information>

Usage

```
<rpc>
  <get-isis-route-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <destination>destination</destination>
    <inet/>
    <inet6/>
    <iso/>
    <topology>topology-choice</topology>
  </get-isis-route-information>
</rpc>
```

Description Show IS-IS routing table.

Contents <destination>—IP address and optional prefix length of destination.

<inet>—Display IPv4 routes.

<inet6>—Display IPv6 routes.

<instance>—Name of IS-IS instance.

<iso>—Display CLNS routes.

<logical-system>—Name of logical system, or 'all'.

<topology>—Name of topology from which routes were learned.

- ipv4-multicast—IPv4 multicast topology.
- ipv6-multicast—IPv6 multicast topology.
- ipv6-unicast—IPv6 unicast topology.
- unicast—Unicast topology.

<get-isis-spf-log-information>

Usage

```
<rpc>
  <get-isis-spf-log-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <level>level</level>
    <topology>topology-choice</topology>
  </get-isis-spf-log-information>
</rpc>
```

Description Show log of SPF runs.

Contents <instance>—Name of IS-IS instance.

<level>—Number of IS-IS level.

<logical-system>—Name of logical system, or 'all'.

<topology>—Name of topology.

- ipv4-multicast—IPv4 multicast topology.
- ipv6-multicast—IPv6 multicast topology.
- ipv6-unicast—IPv6 unicast topology.
- unicast—Unicast topology.

<get-isis-spf-results-brief-information>

Usage

```
<rpc>
  <get-isis-spf-results-brief-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <level>level</level>
    <topology>topology-choice</topology>
  </get-isis-spf-results-brief-information>
</rpc>
```

Description Show brief summary of SPF results.

Contents <instance>—Name of IS-IS instance.

<level>—Number of level.

<logical-system>—Name of logical system, or 'all'.

<topology>—Name of topology.

- ipv4-multicast—IPv4 multicast topology.
- ipv6-multicast—IPv6 multicast topology.
- ipv6-unicast—IPv6 unicast topology.
- unicast—Unicast topology.

<get-isis-spf-results-information>

Usage

```
<rpc>
  <get-isis-spf-results-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <level>level</level>
    <topology>topology-choice</topology>
  </get-isis-spf-results-information>
</rpc>
```

Description Show results from SPF runs.

Contents <instance>—IS-IS instance.

<level>—Number of IS-IS level.

<logical-system>—Name of logical system, or 'all'.

<topology>—Name of topology.

- ipv4-multicast—IPv4 multicast topology.
- ipv6-multicast—IPv6 multicast topology.
- ipv6-unicast—IPv6 unicast topology.
- unicast—Unicast topology.

<get-isis-statistics-information>

Usage

```
<rpc>
  <get-isis-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-isis-statistics-information>
</rpc>
```

Description Show IS-IS performance statistics.

Contents <instance>—Name of IS-IS instance.

<logical-system>—Name of logical system, or 'all'.

<get-l2ckt-connection-information>

Usage

```
<rpc>
  <get-l2ckt-connection-information>
    <logical-system>logical-system</logical-system>
    <neighbor>neighbor</neighbor>
    <interface>interface</interface>
    <down/>
    <up/>
    <up-down/>
    <brief/>
    <extensive/>
    <history/>
    <status/>
    <summary/>
  </get-l2ckt-connection-information>
</rpc>
```

Description Show the Layer 2 circuit connections.

Contents

<brief>—Display one-line version of output.

<down>—Display nonoperational connections.

<extensive>—Display connection status and history.

<history>—Display connection history.

<interface>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<neighbor>—IP address of neighbor.

<status>—Display connection and interface status (default).

<summary>—Display summary output.

<up>—Display operational connections.

<up-down>—Display both operational and nonoperational connections (default).

<get-l2tp-multilink-information>

Usage

```
<rpc>
  <get-l2tp-multilink-information>
    <extensive/>
    <brief/>
    <detail/>
    <statistics/>
    <bundle-id>bundle-id</bundle-id>
  </get-l2tp-multilink-information>
</rpc>
```

Description Show active L2TP multilink list.

Contents <brief>—Display brief output (default).

<bundle-id>—Filter by multilink bundle ID.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<statistics>—Display statistics.

<get-l2tp-session-information>

Usage

```
<rpc>
  <get-l2tp-session-information>
    <extensive/>
    <brief/>
    <detail/>
    <statistics/>
    <tunnel-group>tunnel-group</tunnel-group>
    <local-tunnel-id>local-tunnel-id</local-tunnel-id>
    <interface>interface</interface>
    <local-gateway>local-gateway</local-gateway>
    <local-gateway-name>local-gateway-name</local-gateway-name>
    <peer-gateway>peer-gateway</peer-gateway>
    <peer-gateway-name>peer-gateway-name</peer-gateway-name>
    <local-session-id>local-session-id</local-session-id>
    <user>user</user>
  </get-l2tp-session-information>
</rpc>
```

Description Show active L2TP session list.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<interface>—Interface name to use as filter.

<local-gateway>—Local gateway address to use as filter.

<local-gateway-name>—Local gateway name to use as filter.

<local-session-id>—Local session ID to use as filter.

<local-tunnel-id>—Local tunnel ID to use as filter.

<peer-gateway>—Peer gateway address to use as filter.

<peer-gateway-name>—Peer gateway name to use as filter.

<statistics>—Display statistics.

<tunnel-group>—Tunnel group to use as filter.

<user>—Username to use as filter.

<get-l2tp-summary-information>

Usage

```
<rpc>
  <get-l2tp-summary-information>
    <interface>interface</interface>
  </get-l2tp-summary-information>
</rpc>
```

Description Show L2TP summary information.

Contents <interface>—Name of adaptive services interface.

<get-l2tp-tunnel-information>

Usage

```
<rpc>
  <get-l2tp-tunnel-information>
    <extensive/>
    <brief/>
    <detail/>
    <statistics/>
    <tunnel-group>tunnel-group</tunnel-group>
    <local-tunnel-id>local-tunnel-id</local-tunnel-id>
    <interface>interface</interface>
    <local-gateway>local-gateway</local-gateway>
    <local-gateway-name>local-gateway-name</local-gateway-name>
    <peer-gateway>peer-gateway</peer-gateway>
    <peer-gateway-name>peer-gateway-name</peer-gateway-name>
  </get-l2tp-tunnel-information>
</rpc>
```

Description Show active L2TP tunnel list.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<interface>—Interface name to use as filter.

<local-gateway>—Local gateway address to use as filter.

<local-gateway-name>—Local gateway name to use as filter.

<local-tunnel-id>—Local tunnel ID to use as filter.

<peer-gateway>—Peer gateway address to use as filter.

<peer-gateway-name>—Peer gateway name to use as filter.

<statistics>—Display statistics.

<tunnel-group>—Tunnel group to use as filter.

<get-l2vpn-connection-information>

Usage

```
<rpc>
  <get-l2vpn-connection-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <local-site>local-site</local-site>
    <remote-site>remote-site</remote-site>
    <down/>
    <up/>
    <up-down/>
    <brief/>
    <extensive/>
    <history/>
    <status/>
    <summary/>
  </get-l2vpn-connection-information>
</rpc>
```

Description Show Layer 2 VPN connections information.

Contents

<brief>—Display one-line version of output.

<down>—Display nonoperational connections.

<extensive>—Display connection status and history.

<history>—Display connection history.

<instance>—Name of Layer 2 VPN instance.

<local-site>—Name or ID of Layer 2 VPN local site.

<logical-system>—Name of logical system, or 'all'.

<remote-site>—ID of Layer 2 VPN remote site.

<status>—Display connection and circuit status (default).

<summary>—Display summary output.

<up>—Display operational connections.

<up-down>—Display both non- and operational connections (default).

<get-lacp-interface-information>

Usage

```
<rpc>
  <get-lacp-interface-information>
    <interface-name>interface-name</interface-name>
  </get-lacp-interface-information>
</rpc>
```

Description Show LACP interfaces information.

Contents <interface-name>—Name of interface.

<get-ldp-database-information>

Usage

```
<rpc>
  <get-ldp-database-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <session>session</session>
    <inet/>
    <l2circuit/>
  </get-ldp-database-information>
</rpc>
```

Description Show LDP label database.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<inet>—Display IPv4 bindings.

<instance>—Name of LDP routing instance.

<l2circuit>—Display Layer 2 circuit bindings.

<logical-system>—Name of logical system, or 'all'.

<session>—IP address of session destination.

<get-ldp-fec-filters-information>

Usage

```
<rpc>
  <get-ldp-fec-filters-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <fec>fec</fec>
  </get-ldp-fec-filters-information>
</rpc>
```

Description Show filters for forwarding equivalence classes.

Contents <fec>—Forwarding equivalence class.

<instance>—Name of LDP routing instance.

<logical-system>—Name of logical system, or 'all'.

<get-ldp-interface-information>

Usage

```
<rpc>
  <get-ldp-interface-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <interface-name>interface-name</interface-name>
  </get-ldp-interface-information>
</rpc>
```

Description Show LDP interface status.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of LDP routing instance.

<interface-name>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-ldp-neighbor-information>

Usage

```
<rpc>
  <get-ldp-neighbor-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <neighbor>neighbor</neighbor>
  </get-ldp-neighbor-information>
</rpc>
```

Description Show LDP neighbor status.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of LDP routing instance.

<logical-system>—Name of logical system, or 'all'.

<neighbor>—IP address of the neighbor.

<get-ldp-path-information>

Usage

```
<rpc>
  <get-ldp-path-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <destination>destination</destination>
  </get-ldp-path-information>
</rpc>
```

Description Show LDP path table.

Contents <brief>—Display brief output (default).

<destination>—IP address and optional prefix length of destination.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of LDP routing instance.

<logical-system>—Name of logical system, or 'all'.

<get-ldp-route-information>

Usage

```
<rpc>
  <get-ldp-route-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <destination>destination</destination>
  </get-ldp-route-information>
</rpc>
```

Description Show LDP internal topology table.

Contents <brief>—Display brief output (default).

<destination>—IP address and optional prefix length of destination.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of LDP routing instance.

<logical-system>—Name of logical system, or 'all'.

<get-ldp-session-information>

Usage

```
<rpc>
  <get-ldp-session-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <instance>instance</instance>
    <destination>destination</destination>
  </get-ldp-session-information>
</rpc>
```

Description Show LDP session status.

Contents <brief>—Display brief output (default).

<destination>—IP address of session destination.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of LDP routing instance.

<logical-system>—Name of logical system, or 'all'.

<get-ldp-statistics-information>

Usage

```
<rpc>
  <get-ldp-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-ldp-statistics-information>
</rpc>
```

Description Show LDP statistics.

Contents <instance>—Name of LDP routing instance.

<logical-system>—Name of logical system, or 'all'.

<get-ldp-traffic-statistics-information>

Usage

```
<rpc>
  <get-ldp-traffic-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-ldp-traffic-statistics-information>
</rpc>
```

Description Show packet statistics for LDP label-switched paths.

Contents <instance>—Name of LDP routing instance.

<logical-system>—Name of logical system, or 'all'.

<get-lfmd-information>

Usage

```
<rpc>
  <get-lfmd-information>
    <detail/>
    <brief/>
    <interface-name>interface-name</interface-name>
  </get-lfmd-information>
</rpc>
```

Description Show link-fault-management information.

Contents <brief>—Display brief data (default).

<detail>—Display detailed data.

<interface-name>—Name of physical interface.

<get-license-information>

Usage
```
<rpc>
  <get-license-information/>
</rpc>
```

Description Show installed feature licenses.

<get-license-key-information>

Usage
```
<rpc>
  <get-license-key-information/>
</rpc>
```

Description Show license keys.

<get-license-summary-information>

Usage
```
<rpc>
  <get-license-summary-information/>
</rpc>
```

Description Show feature licenses information.

<get-license-usage-summary>

Usage
```
<rpc>
  <get-license-usage-summary/>
</rpc>
```

Description Show licensed features.

<get-link-services-cpu-usage>

Usage
```
<rpc>
  <get-link-services-cpu-usage>
    <interface>interface</interface>     <!-- mandatory -->
    <brief/>
    <detail/>
  </get-link-services-cpu-usage>
</rpc>
```

Description Show cpu usage as a percentage for the specified PIC.

Contents <brief>—Display brief output (1 and 5 second average).

<detail>—Display detailed output (per cpu average).

<interface>—Name of link services interface.

<get-lm-information>

Usage
```
<rpc>
  <get-lm-information/>
</rpc>
```

Description Show link management information.

<get-lm-peer-information>

Usage
```
<rpc>
  <get-lm-peer-information>
    <peer-name>peer-name</peer-name>
  </get-lm-peer-information>
</rpc>
```

Description Show peer information.

Contents <peer-name>—Name of peer.

<get-lm-peer-statistics>

Usage
```
<rpc>
  <get-lm-peer-statistics>
    <peer-name>peer-name</peer-name>
  </get-lm-peer-statistics>
</rpc>
```

Description Show link management statistics for a peer.

Contents <peer-name>—Name of peer.

<get-lm-routing-information>

Usage
```
<rpc>
  <get-lm-routing-information/>
</rpc>
```

Description Show link management information for routing.

<get-lm-routing-peer-information>

Usage
```
<rpc>
  <get-lm-routing-peer-information>
    <peer-name>peer-name</peer-name>
  </get-lm-routing-peer-information>
</rpc>
```

Description Show peer information.

Contents <peer-name>—Name of peer.

<get-lm-routing-resource-information>

Usage
```
<rpc>
  <get-lm-routing-resource-information>
    <resource-name>resource-name</resource-name>
  </get-lm-routing-resource-information>
</rpc>
```

Description Show resource information.

Contents <resource-name>—Name of resource.

<get-lm-routing-te-link-information>

Usage
```
<rpc>
  <get-lm-routing-te-link-information>
    <brief/>
    <detail/>
    <link-name>link-name</link-name>
  </get-lm-routing-te-link-information>
</rpc>
```

Description Show traffic engineering links information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<link-name>—Name of traffic engineering link.

<get-lm-statistics-information>

Usage
```
<rpc>
  <get-lm-statistics-information/>
</rpc>
```

Description Show link management statistics.

<get-lm-te-link-information>

Usage

```
<rpc>
  <get-lm-te-link-information>
    <brief/>
    <detail/>
    <link-name>link-name</link-name>
  </get-lm-te-link-information>
</rpc>
```

Description Show traffic engineering links information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<link-name>—Name of traffic engineering link.

<get-mac-database>

Usage

```
<rpc>
  <get-mac-database>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
    <mac-address>mac-address</mac-address>
  </get-mac-database>
</rpc>
```

Description Show media access control database information.

Contents <interface-name>—Name of physical or logical interface.

<mac-address>—MAC address.

<get-mip-binding-information>

Usage

```
<rpc>
  <get-mip-binding-information/>
</rpc>
```

Description Show binding information.

<get-mip-ha-interface-information>

Usage
```
<rpc>
  <get-mip-ha-interface-information>
    <interface-name>interface-name</interface-name>
  </get-mip-ha-interface-information>
</rpc>
```

Description Show home-agent details on the interfaces it is running.

Contents <interface-name>—Show home-agent details based on interface.

<get-mip-ha-overview-information>

Usage
```
<rpc>
  <get-mip-ha-overview-information/>
</rpc>
```

Description Show overview.

<get-mip-ha-traffic-information>

Usage
```
<rpc>
  <get-mip-ha-traffic-information/>
</rpc>
```

Description Show traffic information.

<get-mip-ha-virtual-network-information>

Usage
```
<rpc>
  <get-mip-ha-virtual-network-information/>
</rpc>
```

Description Show virtual network related information.

<get-mld-group-information>

Usage

```
<rpc>
  <get-mld-group-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <group-name>group-name</group-name>
  </get-mld-group-information>
</rpc>
```

Description Show MLD group members.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<group-name>—Name of group.

<logical-system>—Name of logical system, or 'all'.

<get-mld-interface-information>

Usage

```
<rpc>
  <get-mld-interface-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <interface-name>interface-name</interface-name>
  </get-mld-interface-information>
</rpc>
```

Description Show MLD interfaces.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<interface-name>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-mld-statistics-information>

Usage

```
<rpc>
  <get-mld-statistics-information>
    <logical-system>logical-system</logical-system>
    <interface>interface</interface>
  </get-mld-statistics-information>
</rpc>
```

Description Show MLD statistics.

Contents <interface>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-mpls-admin-group-information>

Usage

```
<rpc>
  <get-mpls-admin-group-information>
    <logical-system>logical-system</logical-system>
  </get-mpls-admin-group-information>
</rpc>
```

Description Show MPLS administrative groups.

Contents <logical-system>—Name of logical system, or 'all'.

<get-mpls-call-admission-control-information>

Usage

```
<rpc>
  <get-mpls-call-admission-control-information>
    <logical-system>logical-system</logical-system>
    <lsp-name>lsp-name</lsp-name>
  </get-mpls-call-admission-control-information>
</rpc>
```

Description Show CAC information for MPLS LSPs.

Contents <logical-system>—Name of logical system, or 'all'.

<lsp-name>—Name of LSP.

<get-mpls-cspf-information>

Usage
```
<rpc>
  <get-mpls-cspf-information>
    <logical-system>logical-system</logical-system>
  </get-mpls-cspf-information>
</rpc>
```

Description Show Constrained Shortest Path First statistics.

Contents <logical-system>—Name of logical system, or 'all'.

<get-mpls-diffserv-te-information>

Usage
```
<rpc>
  <get-mpls-diffserv-te-information>
    <logical-system>logical-system</logical-system>
  </get-mpls-diffserv-te-information>
</rpc>
```

Description Show MPLS Differentiated Services traffic engineering global properties.

Contents <logical-system>—Name of logical system, or 'all'.

<get-mpls-interface-information>

Usage
```
<rpc>
  <get-mpls-interface-information>
    <logical-system>logical-system</logical-system>
  </get-mpls-interface-information>
</rpc>
```

Description Show MPLS interfaces.

Contents <logical-system>—Name of logical system, or 'all'.

<get-mpls-lsp-defaults-information>

Usage
```
<rpc>
  <get-mpls-lsp-defaults-information>
    <logical-system>logical-system</logical-system>
  </get-mpls-lsp-defaults-information>
</rpc>
```

Description Display LSP defaults.

Contents <logical-system>—Name of logical system, or 'all'.

<get-mpls-lsp-information>

Usage

```
<rpc>
  <get-mpls-lsp-information>
    <logical-system>logical-system</logical-system>
    <ingress/>
    <egress/>
    <transit/>
    <terse/>
    <brief/>
    <detail/>
    <extensive/>
    <descriptions/>
    <up/>
    <down/>
    <unidirectional/>
    <bidirectional/>
    <p2mp/>
    <statistics/>
    <bypass/>
    <regex>regex</regex>
  </get-mpls-lsp-information>
</rpc>
```

Description Show configured label-switched paths.

Contents <bidirectional>—Display bidirectional LSPs.

<brief>—Display brief output (default).

<bypass>—Display LSPs used for protecting other LSPs.

<descriptions>—Display LSP description strings.

<detail>—Display detailed output.

<down>—Display inactive LSPs.

<egress>—Display LSPs ending at this router.

<extensive>—Display extensive output.

<ingress>—Display LSPs originating at this router.

<logical-system>—Name of logical system, or 'all'.

<p2mp>—Display point-to-multipoint LSPs.

<regex>—Regular expression for LSP names to match.

<statistics>—Display packet statistics for LSPs.

<terse>—Display terse output.

<transit>—Display LSPs transiting this router.

<unidirectional>—Display unidirectional LSPs.

<up>—Display active LSPs.

<get-mpls-path-information>

Usage

```
<rpc>
  <get-mpls-path-information>
    <logical-system>logical-system</logical-system>
    <path>path</path>
  </get-mpls-path-information>
</rpc>
```

Description Show configured named paths.

Contents <logical-system>—Name of logical system, or 'all'.

<path>—Name of label-switched path.

<get-msdp-source-active-information>

Usage

```
<rpc>
  <get-msdp-source-active-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <group>group</group>
    <source>source</source>
    <peer>peer</peer>
    <local/>
    <originator>originator</originator>
    <brief/>
    <detail/>
  </get-msdp-source-active-information>
</rpc>
```

Description Show the source-active (SA) cache.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<group>—Name of group.

<instance>—Name of instance.

<local>—Display SA cache entries originating at this router.

<logical-system>—Name of logical system, or 'all'.

<originator>—IPv4 address of peer that originated SA cache entries.

<peer>—IPv4 address of peer.

<source>—Name of source.

<get-msdp-source-information>

Usage

```
<rpc>
  <get-msdp-source-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <source>source</source>
  </get-msdp-source-information>
</rpc>
```

Description Show multicast sources learned from MSDP.

Contents <instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<source>—IP address and optional prefix length of source.

<get-msdp-statistics-information>

Usage

```
<rpc>
  <get-msdp-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <peer>peer</peer>
  </get-msdp-statistics-information>
</rpc>
```

Description Show MSDP statistics.

Contents <instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<peer>—IPv4 address and optional prefix length of MSDP peers.

<get-mspinfo-connections>

Usage

```
<rpc>
  <get-mspinfo-connections>
    <inet/>
    <inet6/>
    <extensive/>
    <show-routing-instances/>
    <interface>interface</interface>
  </get-mspinfo-connections>
</rpc>
```

Description Show connection activity on the extension provider PIC.

Contents <extensive>—Display extensive output.

<inet>—Display IPv4 connections.

<inet6>—Display IPv6 connections.

<interface>—Name of extension provider interface.

<show-routing-instances>—Display routing instances.

<get-mspinfo-packages>

Usage

```
<rpc>
  <get-mspinfo-packages>
    <detail/>
    <interface>interface</interface>
  </get-mspinfo-packages>
</rpc>
```

Description Show packages loaded on the extension provider PIC.

Contents <detail>—No documentation is available yet.

<interface>—Name of extension provider interface.

<get-mspinfo-processes>

Usage

```
<rpc>
  <get-mspinfo-processes>
    <detail/>
    <wide/>
    <interface>interface</interface>
  </get-mspinfo-processes>
</rpc>
```

Description Show system process table on the extension provider PIC.

Contents <detail>—Display detailed output.

<interface>—Name of extension provider interface.

<wide>—Display information even if wider than 80 columns.

<get-mspinfo-processes-brief>

Usage

```
<rpc>
  <get-mspinfo-processes-brief>
    <interface>interface</interface>
  </get-mspinfo-processes-brief>
</rpc>
```

Description Display brief output.

Contents <interface>—Name of extension provider interface.

<get-mspinfo-processes-extensive>

Usage
```
<rpc>
  <get-mspinfo-processes-extensive>
    <interface>interface</interface>
  </get-mspinfo-processes-extensive>
</rpc>
```

Description Display brief output.

Contents <interface>—Name of extension provider interface.

<get-mspinfo-uptime>

Usage
```
<rpc>
  <get-mspinfo-uptime>
    <interface>interface</interface>
  </get-mspinfo-uptime>
</rpc>
```

Description Show uptime on the extension provider PIC.

Contents <interface>—Name of extension provider interface.

<get-mspinfo-virtual-memory>

Usage
```
<rpc>
  <get-mspinfo-virtual-memory>
    <interface>interface</interface>
  </get-mspinfo-virtual-memory>
</rpc>
```

Description Show kernel dynamic memory usage on the extension provider PIC.

Contents <interface>—Name of extension provider interface.

<get-multicast-backup-pe-address-information>

Usage
```
<rpc>
  <get-multicast-backup-pe-address-information>
    <logical-system>logical-system</logical-system>
    <pe_address>pe_address</pe_address>     <!-- mandatory -->
  </get-multicast-backup-pe-address-information>
</rpc>
```

Description Show groups a PE address is associated with.

Contents <logical-system>—Name of logical system, or 'all'.

<pe_address>—IP address of the PE.

<get-multicast-backup-pe-groups-information>

Usage

```
<rpc>
  <get-multicast-backup-pe-groups-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-multicast-backup-pe-groups-information>
</rpc>
```

Description Show backup PE groups.

Contents <instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<get-multicast-flow-maps-information>

Usage

```
<rpc>
  <get-multicast-flow-maps-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
  </get-multicast-flow-maps-information>
</rpc>
```

Description Show configured flow maps.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<get-multicast-interface-information>

Usage

```
<rpc>
  <get-multicast-interface-information>
    <logical-system>logical-system</logical-system>
  </get-multicast-interface-information>
</rpc>
```

Description Show configured interfaces.

Contents <logical-system>—Name of logical system, or 'all'.

<get-multicast-next-hops-information>

Usage

```
<rpc>
  <get-multicast-next-hops-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <identifier>identifier</identifier>
    <inet/>
    <inet6/>
  </get-multicast-next-hops-information>
</rpc>
```

Description Show the multicast next-hop table.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<identifier>—ID of next hop.

<inet>—Display IPv4 information.

<inet6>—Display IPv6 information.

<logical-system>—Name of logical system, or 'all'.

<get-multicast-route-information>

Usage

```
<rpc>
  <get-multicast-route-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <all/>
    <active/>
    <inactive/>
    <brief/>
    <detail/>
    <extensive/>
    <inet/>
    <inet6/>
    <group>group</group>
    <source-prefix>source-prefix</source-prefix>
    <regexp>regexp</regexp>
  </get-multicast-route-information>
</rpc>
```

Description Show the multicast routing table.

Contents <active>—Display active route entries.

<all>—Display all route entries.

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<group>—IP address and optional prefix length of group.

<inactive>—Display inactive route entries.

<inet>—Display IPv4 information.

<inet6>—Display IPv6 information.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<regexp>—Regular expression for session to match.

<source-prefix>—IP address and optional prefix length of source for routes.

<get-multicast-rpf-information>

Usage

```
<rpc>
  <get-multicast-rpf-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <summary/>
    <prefix>prefix</prefix>
    <inet/>
    <inet6/>
  </get-multicast-rpf-information>
</rpc>
```

Description Show reverse-path forwarding (RPF) source network information.

Contents <inet>—Display RPF information for IPv4.

<inet6>—Display RPF information for IPv6.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<prefix>—IP address and optional prefix length of host.

<summary>—Display summary output.

<get-multicast-scope-information>

Usage

```
<rpc>
  <get-multicast-scope-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <inet/>
    <inet6/>
  </get-multicast-scope-information>
</rpc>
```

Description Show administratively scoped multicast information.

Contents <inet>—Display IPv4 information.

<inet6>—Display IPv6 information.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<get-multicast-sessions-information>

Usage

```
<rpc>
  <get-multicast-sessions-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <regexp>regexp</regexp>
  </get-multicast-sessions-information>
</rpc>
```

Description Show announced multicast sessions.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<logical-system>—Name of logical system, or 'all'.

<regexp>—Regular expression for sessions to match.

<get-multicast-snooping-next-hops-information>

Usage

```
<rpc>
  <get-multicast-snooping-next-hops-information>
    <brief/>
    <detail/>
    <identifier>identifier</identifier>
  </get-multicast-snooping-next-hops-information>
</rpc>
```

Description Show the multicast next-hop snooping table.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<identifier>—ID of next hop.

<get-multicast-snooping-route-information>

Usage

```
<rpc>
  <get-multicast-snooping-route-information>
    <all/>
    <active/>
    <inactive/>
    <brief/>
    <detail/>
    <extensive/>
    <vlan-id>vlan-id</vlan-id>
    <mesh-group>mesh-group</mesh-group>
    <group>group</group>
    <source-prefix>source-prefix</source-prefix>
    <regexp>regexp</regexp>
    <bridge-domain>bridge-domain</bridge-domain>
    <instance>instance</instance>
  </get-multicast-snooping-route-information>
</rpc>
```

Description Show the multicast snooping routing table.

Contents

<active>—Display active route entries.

<all>—Display all route entries.

<bridge-domain>—Name of bridge-domain.

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<group>—IP address and optional prefix length of group.

<inactive>—Display inactive route entries.

<instance>—Name of routing-instance.

<mesh-group>—Name of a mesh-group.

<regexp>—Regular expression for session to match.

<source-prefix>—IP address and optional prefix length of source.

<vlan-id>—VLAN ID for a learning domain.

<get-multicast-statistics-information>

Usage

```
<rpc>
  <get-multicast-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <inet/>
    <inet6/>
  </get-multicast-statistics-information>
</rpc>
```

Description Show multicast statistics.

Contents <inet>—Display statistics for IPv4.

<inet6>—Display statistics for IPv6.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<get-multicast-usage-information>

Usage

```
<rpc>
  <get-multicast-usage-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <brief/>
    <detail/>
    <inet/>
    <inet6/>
  </get-multicast-usage-information>
</rpc>
```

Description Show multicast usage information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<inet>—Display IPv4 information.

<inet6>—Display IPv6 information.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<get-mvpn-instance-information>

Usage

```
<rpc>
  <get-mvpn-instance-information>
    <instance-name>instance-name</instance-name>
    <summary/>
    <extensive/>
  </get-mvpn-instance-information>
</rpc>
```

Description Show MVPN instance.

Contents <extensive>—Display detailed version of output.

<instance-name>—Name of MVPN instance.

<summary>—Display summary output.

<get-nai-mip-binding-information>

Usage

```
<rpc>
  <get-nai-mip-binding-information>
    <network-access-identifier>network-access-identifier</network-access-identifier>
<!-- mandatory -->
  </get-nai-mip-binding-information>
</rpc>
```

Description Show binding detail based on nai.

Contents <network-access-identifier>—Show binding detail based on nai.

<get-operational-routing-instance-information>

Usage

```
<rpc>
  <get-operational-routing-instance-information/>
</rpc>
```

Description Show operational routing instances.

<get-ospf-database-information>

Usage

```
<rpc>
  <get-ospf-database-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <summary/>
    <router/>
    <network/>
    <netsummary/>
    <asbrsummary/>
    <external/>
    <nssa/>
    <link-local/>
    <opaque-area/>
    <area>area</area>
    <lsa-id>lsa-id</lsa-id>
    <advertising-router>advertising-router</advertising-router>
    <instance>instance</instance>
  </get-ospf-database-information>
</rpc>
```

Description Show OSPF link-state database.

Contents <advertising-router>—Router ID of advertising router.

<area>—OSPF area ID.

<asbrsummary>—Summary AS boundary router link-state advertisements.

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<external>—External link-state advertisements.

<instance>—Name of OSPF instance.

<link-local>—Link local link-state advertisements.

<logical-system>—Name of logical system, or 'all'.

<lsa-id>—Link-state advertisement ID.

<netsummary>—Summary network link-state advertisements.

<network>—Network link-state advertisements.

<nssa>—Not-so-stubby area link-state advertisements.

<opaque-area>—Opaque area-scope link-state advertisements.

<router>—Router link-state advertisements.

<summary>—Display summary output.

<get-ospf-interface-information>

Usage

```
<rpc>
  <get-ospf-interface-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <interface-name>interface-name</interface-name>
    <area>area</area>
    <instance>instance</instance>
  </get-ospf-interface-information>
</rpc>
```

Description Show OSPF interface status information.

Contents <area>—OSPF area ID.

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of OSPF instance.

<interface-name>—Name of logical interface.

<logical-system>—Name of logical system, or 'all'.

<get-ospf-io-statistics-information>

Usage

```
<rpc>
  <get-ospf-io-statistics-information>
    <logical-system>logical-system</logical-system>
  </get-ospf-io-statistics-information>
</rpc>
```

Description Show OSPF I/O statistics.

Contents <logical-system>—Name of logical system, or 'all'.

<get-ospf-log-information>

Usage

```
<rpc>
  <get-ospf-log-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <topology>topology-choice</topology>
  </get-ospf-log-information>
</rpc>
```

Description Show shortest-path-first calculations from OSPF log.

Contents <instance>—Name of OSPF instance.

<logical-system>—Name of logical system, or 'all'.

<topology>—Name of topology.

- default—Default topology.
- ipv4-multicast—IPv4 multicast topology.
- name—Topology name.

<get-ospf-neighbor-information>

Usage

```
<rpc>
  <get-ospf-neighbor-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <interface>interface</interface>
    <area>area</area>
    <neighbor>neighbor</neighbor>
    <instance>instance-choice</instance>
  </get-ospf-neighbor-information>
</rpc>
```

Description Show OSPF neighbor status information.

Contents <area>—OSPF area ID.

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of OSPF instance.

- all—Show all instances.
- instance-name—Name of OSPF instance.

<interface>—Name of logical interface.

<logical-system>—Name of logical system, or 'all'.

<neighbor>—IP address or ID of neighbor.

<get-ospf-overview-information>

Usage

```
<rpc>
  <get-ospf-overview-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <extensive/>
    <instance>instance</instance>
  </get-ospf-overview-information>
</rpc>
```

Description Show overview of OSPF information.

Contents <brief>—Display brief output (default).

<extensive>—Display extensive output.

<instance>—Name of OSPF instance.

<logical-system>—Name of logical system, or 'all'.

<get-ospf-route-information>

Usage

```
<rpc>
  <get-ospf-route-information>
    <logical-system>logical-system</logical-system>
    <detail/>
    <intra/>
    <inter/>
    <abr/>
    <asbr/>
    <extern/>
    <instance>instance</instance>
    <topology>topology-choice</topology>
  </get-ospf-route-information>
</rpc>
```

Description Show OSPF routing table.

Contents <abr>—Display OSPF routes to area border routers.

<asbr>—Display OSPF routes to AS border routers.

<detail>—Display detailed output.

<extern>—Display external OSPF routes.

<instance>—Name of OSPF instance.

<inter>—Display interarea OSPF routes.

<intra>—Display intraarea OSPF routes.

<logical-system>—Name of logical system, or 'all'.

<topology>—Name of topology.

- default—Default topology.
- ipv4-multicast—IPv4 multicast topology.
- name—Topology name.

<get-ospf-statistics-information>

Usage

```
<rpc>
  <get-ospf-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-ospf-statistics-information>
</rpc>
```

Description Show OSPF statistics.

Contents <instance>—Name of OSPF instance.

<logical-system>—Name of logical system, or 'all'.

<get-ospf3-database-information>

Usage

```
<rpc>
  <get-ospf3-database-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <summary/>
    <router/>
    <network/>
    <inter-area-prefix/>
    <inter-area-router/>
    <external/>
    <nssa/>
    <link/>
    <link-local/>
    <intra-area-prefix/>
    <opaque-area/>
    <area>area</area>
    <lsa-id>lsa-id</lsa-id>
    <advertising-router>advertising-router</advertising-router>
    <instance>instance</instance>
    <realm>realm-choice</realm>
  </get-ospf3-database-information>
</rpc>
```

Description Show OSPFv3 link-state database.

Contents

<advertising-router>—Router ID of advertising router.

<area>—Area ID of OSPFv3 area.

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<external>—Display information about external LSAs.

<instance>—Name of OSPFv3 instance.

<inter-area-prefix>—Display information about inter-area-prefix LSAs.

<inter-area-router>—Display information about inter-area-router LSAs.

<intra-area-prefix>—Display information about intra-area-prefix LSAs.

<link>—Display information about link LSAs.

<link-local>—Display information about link-local LSAs.

<logical-system>—Name of logical system, or 'all'.

<lsa-id>—ID of link-state advertisement.

<network>—Display information about network LSAs.

<nssa>—Display information about NSSA LSAs.

<opaque-area>—Display information about opaque area-scope LSAs.

<realm>—Name of realm.

- ipv4-multicast—IPv4 multicast realm.
- ipv4-unicast—IPv4 unicast realm.
- ipv6-multicast—IPv6 multicast realm.

<router>—Show information about router LSAs.

<summary>—Display summary output.

<get-ospf3-interface-information>

Usage

```
<rpc>
  <get-ospf3-interface-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <interface-name>interface-name</interface-name>
    <area>area</area>
    <instance>instance</instance>
    <realm>realm-choice</realm>
  </get-ospf3-interface-information>
</rpc>
```

Description Show OSPFv3 interface status.

Contents <area>—OSPF area ID.

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of OSPFv3 instance.

<interface-name>—Name of logical interface.

<logical-system>—Name of logical system, or 'all'.

<realm>—Name of realm.

- ipv4-multicast—IPv4 multicast realm.
- ipv4-unicast—IPv4 unicast realm.
- ipv6-multicast—IPv6 multicast realm.

<get-ospf3-io-statistics-information>

Usage

```
<rpc>
  <get-ospf3-io-statistics-information>
    <logical-system>logical-system</logical-system>
  </get-ospf3-io-statistics-information>
</rpc>
```

Description Show OSPFv3 I/O statistics.

Contents <logical-system>—Name of logical system, or 'all'.

<get-ospf3-log-information>

Usage

```
<rpc>
  <get-ospf3-log-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <realm>realm-choice</realm>
  </get-ospf3-log-information>
</rpc>
```

Description Show OSPFv3 SPF log.

Contents <instance>—Name of OSPFv3 instance.

<logical-system>—Name of logical system, or 'all'.

<realm>—Name of realm.

- ipv4-multicast—IPv4 multicast realm.
- ipv4-unicast—IPv4 unicast realm.
- ipv6-multicast—IPv6 multicast realm.

<get-ospf3-neighbor-information>

Usage

```
<rpc>
  <get-ospf3-neighbor-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <interface>interface</interface>
    <area>area</area>
    <neighbor>neighbor</neighbor>
    <instance>instance</instance>
    <realm>realm-choice</realm>
  </get-ospf3-neighbor-information>
</rpc>
```

Description Show OSPFv3 neighbor status.

Contents <area>—OSPF area ID.

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Name of OSPFv3 instance.

<interface>—Name of logical interface.

<logical-system>—Name of logical system, or 'all'.

<neighbor>—IP address or ID of neighbor.

<realm>—Name of realm.

- ipv4-multicast—IPv4 multicast realm.
- ipv4-unicast—IPv4 unicast realm.
- ipv6-multicast—IPv6 multicast realm.

<get-ospf3-overview-information>

Usage

```
<rpc>
  <get-ospf3-overview-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <extensive/>
    <instance>instance</instance>
    <realm>realm-choice</realm>
  </get-ospf3-overview-information>
</rpc>
```

Description Show overview of OSPFv3 information.

Contents <brief>—Display brief output (default).

<extensive>—Display extensive output.

<instance>—Name of OSPFv3 instance.

<logical-system>—Name of logical system, or 'all'.

<realm>—Name of realm.

- ipv4-multicast—IPv4 multicast realm.
- ipv4-unicast—IPv4 unicast realm.
- ipv6-multicast—IPv6 multicast realm.

<get-ospf3-route-information>

Usage

```
<rpc>
  <get-ospf3-route-information>
    <logical-system>logical-system</logical-system>
    <detail/>
    <intra/>
    <inter/>
    <transit/>
    <abr/>
    <asbr/>
    <extern/>
    <instance>instance</instance>
    <realm>realm-choice</realm>
  </get-ospf3-route-information>
</rpc>
```

Description Show the OSPFv3 routing table.

Contents <abr>—Display OSPFv3 routes to area border routers.

<asbr>—Display OSPFv3 routes to AS border routers.

<detail>—Show detailed output.

<extern>—Display external OSPFv3 routes.

<instance>—Name of OSPFv3 instance.

<inter>—Display interarea OSPFv3 routes.

<intra>—Display intraarea OSPFv3 routes.

<logical-system>—Name of logical system, or 'all'.

<realm>—Name of realm.

- ipv4-multicast—IPv4 multicast realm.
- ipv4-unicast—IPv4 unicast realm.
- ipv6-multicast—IPv6 multicast realm.

<transit>—Display OSPFv3 routes to pseudonodes.

<get-ospf3-statistics-information>

Usage

```
<rpc>
  <get-ospf3-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <realm>realm-choice</realm>
  </get-ospf3-statistics-information>
</rpc>
```

Description Show OSPFv3 statistics.

Contents <instance>—Name of OSPFv3 instance.

<logical-system>—Name of logical system, or 'all'.

<realm>—Name of realm.

- ipv4-multicast—IPv4 multicast realm.
- ipv4-unicast—IPv4 unicast realm.
- ipv6-multicast—IPv6 multicast realm.

<get-package-backup-information>

Usage

```
<rpc>
  <get-package-backup-information/>
</rpc>
```

Description Show status of old system software packages.

<get-packet-distribution-information>

Usage

```
<rpc>
  <get-packet-distribution-information>
    <packet-size-distribution-information>packet-size-distribution-information
                </packet-size-distribution-information>
  </get-packet-distribution-information>
</rpc>
```

Description Show packet size distribution.

Contents <packet-size-distribution-information>—Name of service, wildcard, or 'all'.

<get-passive-monitoring-error-information>

Usage
```
<rpc>
  <get-passive-monitoring-error-information>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </get-passive-monitoring-error-information>
</rpc>
```

Description Show error statistics.

Contents <interface-name>—Name of monitoring interface, wildcard, or 'all'.

<get-passive-monitoring-flow-information>

Usage
```
<rpc>
  <get-passive-monitoring-flow-information>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </get-passive-monitoring-flow-information>
</rpc>
```

Description Show flow statistics.

Contents <interface-name>—Name of monitoring interface, wildcard, or 'all'.

<get-passive-monitoring-information>

Usage
```
<rpc>
  <get-passive-monitoring-information/>
</rpc>
```

Description Show information about passive monitoring.

<get-passive-monitoring-memory-information>

Usage
```
<rpc>
  <get-passive-monitoring-memory-information>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </get-passive-monitoring-memory-information>
</rpc>
```

Description Show memory utilization.

Contents <interface-name>—Name of monitoring interface, wildcard, or 'all'.

<get-passive-monitoring-status-information>

Usage
```
<rpc>
  <get-passive-monitoring-status-information>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </get-passive-monitoring-status-information>
</rpc>
```

Description Show status information.

Contents <interface-name>—Name of monitoring interface, wildcard, or 'all'.

<get-passive-monitoring-usage-information>

Usage
```
<rpc>
  <get-passive-monitoring-usage-information>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </get-passive-monitoring-usage-information>
</rpc>
```

Description Show CPU utilization.

Contents <interface-name>—Name of monitoring interface, wildcard, or 'all'.

<get-pdp-diagnostics-per-apn>

Usage
```
<rpc>
  <get-pdp-diagnostics-per-apn>
    <apn>apn</apn>     <!-- mandatory -->
  </get-pdp-diagnostics-per-apn>
</rpc>
```

Description Show PDP context diagnostics information.

Contents <apn>—APN for which to show PDP Contexts.

<get-pfe-information>

Usage
```
<rpc>
  <get-pfe-information/>
</rpc>
```

Description Show list of Packet Forwarding Engine components.

<get-pfe-statistics>

Usage

```
<rpc>
  <get-pfe-statistics>
    <sfm>sfm</sfm>
    <feb>feb</feb>
    <lcc>lcc</lcc>
    <fpc>fpc</fpc>
  </get-pfe-statistics>
</rpc>
```

Description Show Packet Forwarding Engine traffic statistics.

Contents <feb>—Slot number of FEB for which to show traffic statistics.

<fpc>—Slot number of FPC for which to show traffic statistics.

<lcc>—Slot number of LCC that houses FPC.

<sfm>—Slot number of SFM for which to show traffic statistics.

<get-pgcpd-active-configuration>

Usage

```
<rpc>
  <get-pgcpd-active-configuration/>
</rpc>
```

Description Show pgcpd active-configuration.

<get-pgm-nak>

Usage

```
<rpc>
  <get-pgm-nak/>
</rpc>
```

Description Show PGM negative acknowledgments.

<get-pgm-source-path-messages>

Usage

```
<rpc>
  <get-pgm-source-path-messages/>
</rpc>
```

Description Show PGM source path messages.

<get-pgm-statistics>

Usage
```
<rpc>
  <get-pgm-statistics/>
</rpc>
```

Description Show PGM packet statistics.

<get-pic-detail>

Usage
```
<rpc>
  <get-pic-detail>
    <fpc-slot>fpc-slot</fpc-slot>     <!-- mandatory -->
    <pic-slot>pic-slot</pic-slot>     <!-- mandatory -->
  </get-pic-detail>
</rpc>
```

Description Show Physical Interface Card state, type, and uptime.

Contents <fpc-slot>—Slot number of FPC that houses PIC.

<pic-slot>—PIC slot number.

<get-pic-information>

Usage
```
<rpc>
  <get-pic-information>
    <slot>slot</slot>
  </get-pic-information>
</rpc>
```

Description Show Physical Interface Cards installed in FPC.

Contents <slot>—FPC slot number.

<get-pim-bootstrap-information>

Usage
```
<rpc>
  <get-pim-bootstrap-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-pim-bootstrap-information>
</rpc>
```

Description Show PIM bootstrap routers.

Contents <instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<get-pim-interfaces-information>

Usage

```
<rpc>
  <get-pim-interfaces-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <interface-name>interface-name</interface-name>
    <inet/>
    <inet6/>
  </get-pim-interfaces-information>
</rpc>
```

Description Show PIM interfaces.

Contents <inet>—Display IPv4 interfaces.

<inet6>—Display IPv6 interfaces.

<instance>—Name of instance.

<interface-name>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-pim-join-information>

Usage

```
<rpc>
  <get-pim-join-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <brief/>
    <detail/>
    <extensive/>
    <range>range</range>
    <inet/>
    <inet6/>
  </get-pim-join-information>
</rpc>
```

Description Show PIM join/prune state.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<inet>—Display IPv4 join/prune state.

<inet6>—Display IPv6 join/prune state.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<range>—IP address and optional prefix length of group.

<get-pim-mdt-information>

Usage

```
<rpc>
  <get-pim-mdt-information>
    <logical-system>logical-system</logical-system>
    <outgoing/>
    <incoming/>
    <brief/>
    <detail/>
    <extensive/>
    <range>range</range>
    <instance>instance</instance>     <!-- mandatory -->
  </get-pim-mdt-information>
</rpc>
```

Description Show state of PIM multicast data tunnels.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<incoming>—Display incoming multicast data tunnels.

<instance>—Name of PIM instance.

<logical-system>—Name of logical system, or 'all'.

<outgoing>—Display outgoing multicast data tunnels.

<range>—IP address and optional prefix length of group.

<get-pim-neighbors-information>

Usage

```
<rpc>
  <get-pim-neighbors-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <brief/>
    <detail/>
    <inet/>
    <inet6/>
  </get-pim-neighbors-information>
</rpc>
```

Description Show PIM neighbors.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<inet>—Display IPv4 neighbors.

<inet6>—Display IPv6 neighbors.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<get-pim-rps-information>

Usage

```
<rpc>
  <get-pim-rps-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <brief/>
    <detail/>
    <extensive/>
    <group-address>group-address</group-address>
    <inet/>
    <inet6/>
  </get-pim-rps-information>
</rpc>
```

Description Show PIM rendezvous points.

Contents

<brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<group-address>—IP address of group.

<inet>—Display IPv4 rendezvous points.

<inet6>—Display IPv6 rendezvous points.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<get-pim-source-information>

Usage

```
<rpc>
  <get-pim-source-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <brief/>
    <detail/>
    <source>source</source>
    <inet/>
    <inet6/>
  </get-pim-source-information>
</rpc>
```

Description Show the PIM source RPF state.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<inet>—Display IPv4 PIM source RPF state.

<inet6>—Display IPv6 PIM source RPF state.

<instance>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<source>—IP address and optional prefix length of source RPFs.

<get-pim-statistics-information>

Usage

```
<rpc>
  <get-pim-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <interface>interface</interface>
    <inet/>
    <inet6/>
  </get-pim-statistics-information>
</rpc>
```

Description Show PIM statistics.

Contents <inet>—Display IPv4 PIM statistics.

<inet6>—Display IPv6 PIM statistics.

<instance>—Name of instance.

<interface>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<get-power-management>

Usage

```
<rpc>
  <get-power-management/>
</rpc>
```

Description Show power ratings for the router.

<get-ppp-address-pool-inforamation>

Usage

```
<rpc>
  <get-ppp-address-pool-inforamation>
    <detail/>
    <pool-name>pool-name</pool-name>      <!-- mandatory -->
  </get-ppp-address-pool-inforamation>
</rpc>
```

Description Show PPP address pool information.

Contents <detail>—Display detailed information.

<pool-name>—Address pool name.

<get-ppp-interface-information>

Usage

```
<rpc>
  <get-ppp-interface-information>
    <interface-name>interface-name</interface-name>      <!-- mandatory -->
    <extensive/>
    <terse/>
  </get-ppp-interface-information>
</rpc>
```

Description Show PPP interface information.

Contents <extensive>—Display detailed output.

<interface-name>—Interface name.

<terse>—Display terse output.

<get-ppp-statistics-information>

Usage
```
<rpc>
  <get-ppp-statistics-information>
    <detail/>
    <memory/>
  </get-ppp-statistics-information>
</rpc>
```

Description Show PPP statistics.

Contents <detail>—Display detailed statistics.

<memory>—Display PPP process memory statistics.

<get-ppp-summary-information>

Usage
```
<rpc>
  <get-ppp-summary-information/>
</rpc>
```

Description Show PPP summary information.

<get-pppoe-interface-information>

Usage
```
<rpc>
  <get-pppoe-interface-information>
    <brief/>
    <detail/>
    <extensive/>
    <interface-name>interface-name</interface-name>
  </get-pppoe-interface-information>
</rpc>
```

Description Show interface information.

Contents <brief>—Show brief output.

<detail>—Show detailed output.

<extensive>—Show extensive output.

<interface-name>—Name of PPPoE logical interface.

<get-pppoe-statistics-information>

Usage
```
<rpc>
  <get-pppoe-statistics-information/>
</rpc>
```

Description Show sum of statistics of all interfaces.

<get-pppoe-version>

Usage
```
<rpc>
  <get-pppoe-version/>
</rpc>
```

Description Show version.

<get-probe-results>

Usage
```
<rpc>
  <get-probe-results>
    <owner>owner</owner>
    <test>test</test>
  </get-probe-results>
</rpc>
```

Description Show probe results.

Contents <owner>—Name of owner.

<test>—Name of test.

<get-process-health-information>

Usage
```
<rpc>
  <get-process-health-information>
    <process-name>process-name</process-name>
    <pid>pid</pid>
  </get-process-health-information>
</rpc>
```

Description Show process health information.

Contents <pid>—Process identifier.

<process-name>—Process name.

<get-psd-information>

Usage
```
<rpc>
  <get-psd-information/>
</rpc>
```

Description Show Protected System Domain (PSD) status.

<get-radius-profile-access-test-result>

Usage

```
<rpc>
  <get-radius-profile-access-test-result>
    <profile-name>profile-name</profile-name>     <!-- mandatory -->
    <user>user</user>     <!-- mandatory -->
    <password>password</password>     <!-- mandatory -->
    <get-radius-profile-access-test-detail-result/>
  </get-radius-profile-access-test-result>
</rpc>
```

Description Test user access to an access profile.

Contents <get-radius-profile-access-test-detail-result>—Show radius attributes returned by the server.

<password>—Password for the user.

<profile-name>—Access profile name.

<user>—User name to be authenticated to the RADIUS server.

<get-radius-server-access-test-result>

Usage

```
<rpc>
  <get-radius-server-access-test-result>
    <address>address</address>     <!-- mandatory -->
    <authentication-port>authentication-port</authentication-port>
    <secret>secret</secret>     <!-- mandatory -->
    <user>user</user>     <!-- mandatory -->
    <password>password</password>     <!-- mandatory -->
    <timeout>seconds</timeout>
    <retry>retry</retry>
    <source-address>source-address</source-address>
  </get-radius-server-access-test-result>
</rpc>
```

Description Test user access to a radius server.

Contents <address>—RADIUS server address.

<authentication-port>—RADIUS server authentication port number.

<password>—Password for the user.

<retry>—Retry attempts.

<secret>—Shared secret with the RADIUS server.

<source-address>—Use specified address as source address.

<timeout>—Request timeout period.

<user>—User name to be authenticated to the RADIUS server.

<get-rescue-information>

Usage

```
<rpc>
  <get-rescue-information>
    <format>format-choice</format>
  </get-rescue-information>
</rpc>
```

Description Show rescue configuration.

Contents <format>—Output format of configuration (XML or text).

- text—Output text configuration.
- xml—Output XML configuration.

<get-rip-general-statistics-information>

Usage

```
<rpc>
  <get-rip-general-statistics-information>
    <logical-system>logical-system</logical-system>
  </get-rip-general-statistics-information>
</rpc>
```

Description Show RIP general statistics.

Contents <logical-system>—Name of logical system, or 'all'.

<get-rip-neighbor-information>

Usage

```
<rpc>
  <get-rip-neighbor-information>
    <logical-system>logical-system</logical-system>
    <neighbor-name>neighbor-name</neighbor-name>
    <instance>instance-choice</instance>
  </get-rip-neighbor-information>
</rpc>
```

Description Show RIP interfaces.

Contents <instance>—Name of RIP instance.

- all—Show all instances.
- instance-name—Name of RIP instance.

<logical-system>—Name of logical system, or 'all'.

<neighbor-name>—Name of RIP neighbor.

<get-rip-statistics-information>

Usage

```
<rpc>
  <get-rip-statistics-information>
    <logical-system>logical-system</logical-system>
    <neighbor-name>neighbor-name</neighbor-name>
    <instance>instance-choice</instance>
  </get-rip-statistics-information>
</rpc>
```

Description Show RIP statistics.

Contents <instance>—Name of RIP instance.

- all—Show all instances.
- instance-name—Name of RIP instance.

<logical-system>—Name of logical system, or 'all'.

<neighbor-name>—Name of RIP neighbor.

<get-rmon-alarm-information>

Usage

```
<rpc>
  <get-rmon-alarm-information>
    <brief/>
    <detail/>
  </get-rmon-alarm-information>
</rpc>
```

Description Show RMON alarms.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<get-rmon-event-information>

Usage

```
<rpc>
  <get-rmon-event-information>
    <brief/>
    <detail/>
  </get-rmon-event-information>
</rpc>
```

Description Show RMON events.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<get-rmon-history-information>

Usage

```
<rpc>
  <get-rmon-history-information>
    <index>index</index>
    <sample-index>sample-index</sample-index>
  </get-rmon-history-information>
</rpc>
```

Description Show RMON history.

Contents <index>—No documentation is available yet.

<sample-index>—No documentation is available yet.

<get-rmon-information>

Usage

```
<rpc>
  <get-rmon-information/>
</rpc>
```

Description Show remote monitoring information.

<get-rmon-log-information>

Usage

```
<rpc>
  <get-rmon-log-information/>
</rpc>
```

Description Show rmon monitoring logs.

<get-rollback-information>

Usage

```
<rpc>
  <get-rollback-information>
    <rollback>rollback</rollback>     <!-- mandatory -->
    <compare>compare</compare>
    <format>format-choice</format>
  </get-rollback-information>
</rpc>
```

Description Show rolled back configuration.

Contents <compare>—Rollback number to compare.

<format>—Output format of configuration (XML or text).

- text—Output text configuration.
- xml—Output XML configuration.

<rollback>—Rollback number to display.

<get-route-engine-information>

Usage

```
<rpc>
  <get-route-engine-information>
    <slot>slot</slot>
  </get-route-engine-information>
</rpc>
```

Description Show Routing Engine status.

Contents <slot>—Routing Engine slot number.

<get-route-information>

Usage

```
<rpc>
  <get-route-information>
    <logical-system>logical-system</logical-system>
    <destination>destination</destination>
    <all/>
    <terse/>
    <brief/>
    <detail/>
    <extensive/>
    <best/>
    <exact/>
    <range/>
    <table>table</table>
    <label>label</label>
    <ccc>ccc</ccc>
    <inactive-prefix/>
    <inactive-path/>
    <active-path/>
    <damping>damping-choice</damping>
    <next-hop>next-hop</next-hop>
    <source-gateway>source-gateway</source-gateway>
    <protocol>protocol-choice</protocol>
    <advertising-protocol-name>advertising-protocol-name-choice
                    </advertising-protocol-name>
    <neighbor>neighbor</neighbor>
    <receive-protocol-name>receive-protocol-name-choice</receive-protocol-name>
    <peer>peer</peer>
    <aspath-regex>aspath-regex</aspath-regex>
    <community>...</community>
    <no-community/>
    <community-name>community-name</community-name>
    <label-switched-path>label-switched-path</label-switched-path>
    <hidden/>
  </get-route-information>
</rpc>
```

Description Show routing table information.

Contents <active-path>—Show active paths.

<advertising-protocol-name>—Name of dynamic routing protocol.

- bgp—Border Gateway Protocol.
- dvmrp—Distance Vector Multicast Routing Protocol.
- msdp—Multicast Source Discovery Protocol.
- pim—Protocol Independent Multicast.
- rip—Routing Information Protocol.
- ripng—Routing Information Protocol for IPv6.

<all>—Show all entries, including hidden entries.

<aspath-regex>—BGP AS path regular expression for entries to match.

<best>—Show longest matching route.

<brief>—Display brief output.

<ccc>—Name of entry in MPLS table with a circuit cross-connect interface.

<community>—Identifier for community (can include wildcards).

<community-name>—Name of configured community policy to match.

<damping>—Show entries subjected to particular kind of route damping.

- decayed—Entries that are decayed but not suppressed.
- history—Entries that are withdrawn but have history.
- suppressed—Entries suppressed due to route damping.

<destination>—IP address and optional prefix length of destination.

<detail>—Display detailed output.

<exact>—Show routes that match exactly.

<extensive>—Display extensive output.

<hidden>—Show hidden entries.

<inactive-path>—Show inactive paths.

<inactive-prefix>—Show inactive route destinations.

<label>—Label of entry in MPLS routing table.

<label-switched-path>—Name of LSP tunnel associated with entries.

<logical-system>—Name of logical system, or 'all'.

<neighbor>—IP address of neighbor (local for RIP and RIPng).

<next-hop>—IP address of next hop that is destination for entries.

<no-community>—Show entries with no associated community.

<peer>—IP address of neighbor.

<protocol>—Name of protocol that is source for entries.

- access—Access route.
- access-internal—Access-internal route.

- aggregate—Locally generated aggregate route.
- bgp—Border Gateway Protocol.
- ccc—Circuit cross-connect.
- direct—Directly connected routes.
- dvmrp—Distance Vector Multicast Routing Protocol.
- esis—End System-to-Intermediate System.
- isis—Intermediate System-to-Intermediate System.
- l2circuit—Layer 2 circuit.
- l2vpn—Layer 2 virtual private network.
- ldp—Label Distribution Protocol.
- local—Local system addresses.
- mpls—Multiprotocol Label Switching.
- msdp—Multicast Source Discovery Protocol.
- ospf—Open Shortest Path First.
- ospf2—Open Shortest Path First Version 2.
- ospf3—Open Shortest Path First Version 3.
- pim—Protocol Independent Multicast.
- rip—Routing Information Protocol.
- ripng—Routing Information Protocol for IPv6.
- rsvp—Resource Reservation Protocol.
- rtarget—Local route target VPN membership.
- static—Statically defined prefixes.
- tunnel—Dynamic tunnel.
- vpn—Layer 3 virtual private network.

<range>—Show all entries in prefix range.

<receive-protocol-name>—Name of dynamic routing protocol.

- bgp—Border Gateway Protocol.
- dvmrp—Distance Vector Multicast Routing Protocol.

- msdp—Multicast Source Discovery Protocol.
- pim—Protocol Independent Multicast.
- rip—Routing Information Protocol.
- ripng—Routing Information Protocol for IPv6.

<source-gateway>—IP address of source router for entries.

<table>—Name of routing table.

<terse>—Display terse output.

<get-route-summary-information>

Usage

```
<rpc>
  <get-route-summary-information>
    <logical-system>logical-system</logical-system>
  </get-route-summary-information>
</rpc>
```

Description Show routing table statistics.

Contents <logical-system>—Name of logical system, or 'all'.

<get-rsvp-interface-information>

Usage

```
<rpc>
  <get-rsvp-interface-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <link-management/>
    <interface-name>interface-name</interface-name>
  </get-rsvp-interface-information>
</rpc>
```

Description Show RSVP interfaces.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<interface-name>—Name of logical interface.

<link-management>—Display RSVP interfaces created by LMP.

<logical-system>—Name of logical system, or 'all'.

<get-rsvp-neighbor-information>

Usage

```
<rpc>
  <get-rsvp-neighbor-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
  </get-rsvp-neighbor-information>
</rpc>
```

Description Show RSVP neighbors.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<get-rsvp-session-information>

Usage

```
<rpc>
  <get-rsvp-session-information>
    <logical-system>logical-system</logical-system>
    <ingress/>
    <egress/>
    <transit/>
    <lsp/>
    <nolsp/>
    <up/>
    <down/>
    <unidirectional/>
    <bidirectional/>
    <p2mp/>
    <terse/>
    <brief/>
    <detail/>
    <extensive/>
    <statistics/>
    <bypass/>
    <session-name>session-name</session-name>
    <interface>interface</interface>
    <te-link>te-link</te-link>
  </get-rsvp-session-information>
</rpc>
```

Description Show active RSVP sessions.

Contents <bidirectional>—Display bidirectional RSVP sessions.

<brief>—Display brief output (default).

<bypass>—Display RSVP sessions used to protect LSPs.

<detail>—Display detailed output.

<down>—Display inactive LSPs.

<egress>—Display RSVP sessions ending at this router.

<extensive>—Display extensive output.

<ingress>—Display RSVP sessions originating at this router.

<interface>—Name of interface.

<logical-system>—Name of logical system, or 'all'.

<lsp>—Display RSVP sessions used to set up LSPs.

<nolsp>—Display RSVP sessions not used to set up LSPs.

<p2mp>—Display point-to-multipoint RSVP sessions.

<session-name>—Name of RSVP session.

<statistics>—Display packet statistics.

<te-link>—Name of traffic engineering link.

<terse>—Display terse output.

<transit>—Display RSVP sessions transiting this router.

<unidirectional>—Display unidirectional RSVP sessions.

<up>—Display active LSPs.

<get-rsvp-statistics-information>

Usage

```
<rpc>
  <get-rsvp-statistics-information>
    <logical-system>logical-system</logical-system>
  </get-rsvp-statistics-information>
</rpc>
```

Description Show RSVP statistics.

Contents <logical-system>—Name of logical system, or 'all'.

<get-rsvp-version-information>

Usage

```
<rpc>
  <get-rsvp-version-information>
    <logical-system>logical-system</logical-system>
  </get-rsvp-version-information>
</rpc>
```

Description Show RSVP version.

Contents <logical-system>—Name of logical system, or 'all'.

<get-rtexport-instance-information>

Usage

```
<rpc>
  <get-rtexport-instance-information>
    <brief/>
    <detail/>
    <logical-system>logical-system</logical-system>
    <instance-name>instance-name</instance-name>
  </get-rtexport-instance-information>
</rpc>
```

Description Show instance configuration and runtime information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<instance-name>—Name of instance.

<logical-system>—Name of logical system, or 'all'.

<get-rtexport-table-information>

Usage

```
<rpc>
  <get-rtexport-table-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <table-name>table-name</table-name>
  </get-rtexport-table-information>
</rpc>
```

Description Show instance export information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<table-name>—Name of table.

<get-rtexport-target-information>

Usage

```
<rpc>
  <get-rtexport-target-information>
    <brief/>
    <detail/>
    <logical-system>logical-system</logical-system>
    <community>...</community>
  </get-rtexport-target-information>
</rpc>
```

Description Show VPN routing and forwarding route target export information.

Contents <brief>—Display brief output (default).

<community>—Community to match (can include wildcards).

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<get-rtflow-dep-information>

Usage

```
<rpc>
  <get-rtflow-dep-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <table>table</table>
    <destination>destination</destination>
  </get-rtflow-dep-information>
</rpc>
```

Description Show flow route validation tables.

Contents <brief>—Display brief output (default).

<destination>—IP address and optional prefix length of destination.

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<table>—Name of unicast routing table.

<get-sap-listen-information>

Usage

```
<rpc>
  <get-sap-listen-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
  </get-sap-listen-information>
</rpc>
```

Description Show addresses to listen for session announcements.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<get-scb-information>

Usage

```
<rpc>
  <get-scb-information/>
</rpc>
```

Description Show System Control Board status.

<get-security-associations-information>

Usage

```
<rpc>
  <get-security-associations-information>
    <brief/>
    <detail/>
    <sa-name>sa-name</sa-name>
  </get-security-associations-information>
</rpc>
```

Description Show IPSec security association information.

Contents <brief>—Display brief output.

<detail>—Display detailed output.

<sa-name>—Name of security association.

<get-service-accounting-aggregation-as-information>

Usage

```
<rpc>
  <get-service-accounting-aggregation-as-information>
    <as-information>as-information</as-information>
    <limit>limit</limit>
    <order>order-choice</order>
    <extensive/>
    <detail/>
    <terse/>
    <source-as>source-as</source-as>
    <destination-as>destination-as</destination-as>
    <input-snmp-interface-index>input-snmp-interface-index
                </input-snmp-interface-index>
    <output-snmp-interface-index>output-snmp-interface-index
                </output-snmp-interface-index>
  </get-service-accounting-aggregation-as-information>
</rpc>
```

Description Show aggregation type AS.

Contents <as-information>—Name of service, wildcard, or 'all'.

<destination-as>—Filter term destination AS.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<input-snmp-interface-index>—Filter term input SNMP interface index.

<limit>—Maximum number of flows to display.

<order>—Order for displaying flows.

- bytes—Display largest number of bytes first.
- packets—Display largest number of packets first.

<output-snmp-interface-index>—Filter term output SNMP interface index.

<source-as>—Filter term source-as.

<terse>—Display terse output (default).

<get-service-accounting-aggregation-destination-prefix-information>

Usage

```
<rpc>
  <get-service-accounting-aggregation-destination-prefix-information>
    <destination-prefix-information>destination-prefix-information
                </destination-prefix-information>
    <limit>limit</limit>
    <order>order-choice</order>
    <extensive/>
    <detail/>
    <terse/>
    <destination-prefix>destination-prefix</destination-prefix>
    <destination-as>destination-as</destination-as>
    <output-snmp-interface-index>output-snmp-interface-index
                </output-snmp-interface-index>
  </get-service-accounting-aggregation-destination-prefix-information>
</rpc>
```

Description Show aggregation type destination-prefix.

Contents

<destination-as>—Filter term destination-as.

<destination-prefix>—Filter term destination prefix.

<destination-prefix-information>—Name of service, wildcard, or 'all'.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<limit>—Maximum number of flows to display.

<order>—Order for displaying flows.

- bytes—Display largest number of bytes first.
- packets—Display largest number of packets first.

<output-snmp-interface-index>—Filter term output SNMP interface index.

<terse>—Display terse output (default).

<get-service-accounting-aggregation-information>

Usage

```
<rpc>
  <get-service-accounting-aggregation-information/>
</rpc>
```

Description Show aggregation information.

<get-service-accounting-aggregation-protocol-port-information>

Usage

```
<rpc>
  <get-service-accounting-aggregation-protocol-port-information>
    <protocol-port-information>protocol-port-information
                    </protocol-port-information>
    <limit>limit</limit>
    <order>order-choice</order>
    <extensive/>
    <detail/>
    <terse/>
    <proto>proto</proto>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
  </get-service-accounting-aggregation-protocol-port-information>
</rpc>
```

Description Show aggregation type protocol-port.

Contents <destination-port>—Filter term destination port.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<limit>—Maximum number of flows to display.

<order>—Order for displaying flows.

- bytes—Display largest number of bytes first.
- packets—Display largest number of packets first.

<proto>—Filter term protocol.

<protocol-port-information>—Name of service, wildcard, or 'all'.

<source-port>—Filter term source port.

<terse>—Display terse output (default).

<get-service-accounting-aggregation-source-destination-prefix-information>

Usage

```
<rpc>
  <get-service-accounting-aggregation-source-destination-prefix-information>
    <source-destination-prefix-information>source-destination-prefix-information
                </source-destination-prefix-information>
    <limit>limit</limit>
    <order>order-choice</order>
    <extensive/>
    <detail/>
    <terse/>
    <source-prefix>source-prefix</source-prefix>
    <source-as>source-as</source-as>
    <input-snmp-interface-index>input-snmp-interface-index
                </input-snmp-interface-index>
    <destination-prefix>destination-prefix</destination-prefix>
    <destination-as>destination-as</destination-as>
    <output-snmp-interface-index>output-snmp-interface-index
                </output-snmp-interface-index>
  </get-service-accounting-aggregation-source-destination-prefix-information>
</rpc>
```

Description Show aggregation type source-destination-prefix.

Contents <destination-as>—Filter term destination-as.

<destination-prefix>—Filter term destination prefix.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<input-snmp-interface-index>—Filter term input SNMP interface index.

<limit>—Maximum number of flows to display.

<order>—Order for displaying flows.

- bytes—Display largest number of bytes first.
- packets—Display largest number of packets first.

<output-snmp-interface-index>—Filter term output SNMP interface index.

<source-as>—Filter term source-as.

<source-destination-prefix-information>—Name of service, wildcard, or 'all'.

<source-prefix>—Filter term source prefix.

<terse>—Display terse output (default).

<get-service-accounting-aggregation-source-prefix-information>

Usage

```
<rpc>
  <get-service-accounting-aggregation-source-prefix-information>
    <source-prefix-information>source-prefix-information
                </source-prefix-information>
    <limit>limit</limit>
    <order>order-choice</order>
    <extensive/>
    <detail/>
    <terse/>
    <source-prefix>source-prefix</source-prefix>
    <source-as>source-as</source-as>
    <input-snmp-interface-index>input-snmp-interface-index
                </input-snmp-interface-index>
  </get-service-accounting-aggregation-source-prefix-information>
</rpc>
```

Description Show aggregation type source-prefix.

Contents

<detail>—Display detailed output.

<extensive>—Display extensive output.

<input-snmp-interface-index>—Filter term input SNMP interface index.

<limit>—Maximum number of flows to display.

<order>—Order for displaying flows.

- bytes—Display largest number of bytes first.
- packets—Display largest number of packets first.

<source-as>—Filter term source-as.

<source-prefix>—Filter term source prefix.

<source-prefix-information>—Name of service, wildcard, or 'all'.

<terse>—Display terse output (default).

<get-service-accounting-aggregation-template-information>

Usage

```
<rpc>
  <get-service-accounting-aggregation-template-information>
    <template-name>template-name</template-name> <!-- mandatory -->
    <extensive/>
    <detail/>
    <terse/>
  </get-service-accounting-aggregation-template-information>
</rpc>
```

Description Show aggregation type template.

Contents <detail>—Display detailed output.

<extensive>—Display extensive output.

<template-name>—Name of template.

<terse>—Display terse output (default).

<get-service-accounting-errors-information>

Usage

```
<rpc>
  <get-service-accounting-errors-information>
    <error-information>error-information</error-information>
  </get-service-accounting-errors-information>
</rpc>
```

Description Show error statistics.

Contents <error-information>—Name of service, wildcard, or 'all'.

<get-service-accounting-flow-detail>

Usage

```
<rpc>
  <get-service-accounting-flow-detail>
    <flow-detail-information>flow-detail-information</flow-detail-information>
    <limit>limit</limit>
    <order>order-choice</order>
    <extensive/>
    <detail/>
    <terse/>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <input-snmp-interface-index>input-snmp-interface-index
                </input-snmp-interface-index>
    <output-snmp-interface-index>output-snmp-interface-index
                </output-snmp-interface-index>
    <source-as>source-as</source-as>
    <destination-as>destination-as</destination-as>
    <tos>tos</tos>
    <proto>proto</proto>
  </get-service-accounting-flow-detail>
</rpc>
```

Description Show flow detail.

Contents <destination-as>—Filter term destination AS.

<destination-port>—Filter term destination port.

<destination-prefix>—Filter term destination prefix.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<flow-detail-information>—Name of service, wildcard, or 'all'.

<input-snmp-interface-index>—Filter term input SNMP interface index.

<limit>—Maximum number of flows to display.

<order>—Order for displaying flows.

- bytes—Display largest number of bytes first.
- packets—Display largest number of packets first.

<output-snmp-interface-index>—Filter term output SNMP interface index.

<proto>—Filter term protocol.

<source-as>—Filter term source AS.

<source-port>—Filter term source port.

<source-prefix>—Filter term source prefix.

<terse>—Display terse output (default).

<tos>—Filter term ToS.

<get-service-accounting-flow-information>

Usage
```
<rpc>
  <get-service-accounting-flow-information>
    <flow-information>flow-information</flow-information>
  </get-service-accounting-flow-information>
</rpc>
```

Description Show flow information.

Contents <flow-information>—Name of service, wildcard, or 'all'.

<get-service-accounting-information>

Usage
```
<rpc>
  <get-service-accounting-information/>
</rpc>
```

Description Show sampled accounting service.

<get-service-accounting-memory-information>

Usage
```
<rpc>
  <get-service-accounting-memory-information>
    <memory-information>memory-information</memory-information>
  </get-service-accounting-memory-information>
</rpc>
```

Description Show memory information.

Contents <memory-information>—Name of service, wildcard, or 'all'.

<get-service-accounting-status-information>

Usage

```
<rpc>
  <get-service-accounting-status-information>
    <status-information>status-information</status-information>
  </get-service-accounting-status-information>
</rpc>
```

Description Show service accounting parameters.

Contents <status-information>—Name of service, wildcard, or 'all'.

<get-service-accounting-usage-information>

Usage

```
<rpc>
  <get-service-accounting-usage-information>
    <usage-information>usage-information</usage-information>
  </get-service-accounting-usage-information>
</rpc>
```

Description Show CPU usage.

Contents <usage-information>—Name of service, wildcard, or 'all'.

<get-service-cos-diffserv-statistics>

Usage

```
<rpc>
  <get-service-cos-diffserv-statistics>
    <brief/>
    <detail/>
    <extensive/>
    <summary/>
  </get-service-cos-diffserv-statistics>
</rpc>
```

Description Show Diffserv marking statistics.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<summary>—Display summary output.

<get-service-cos-forwarding-class-statistics>

Usage

```
<rpc>
  <get-service-cos-forwarding-class-statistics>
    <brief/>
    <detail/>
    <extensive/>
    <summary/>
  </get-service-cos-forwarding-class-statistics>
</rpc>
```

Description Show forwarding Class statistics.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<summary>—Display summary output.

<get-service-cos-statistics-information>

Usage

```
<rpc>
  <get-service-cos-statistics-information>
    <brief/>
    <detail/>
    <extensive/>
    <summary/>
    <service-set>service-set</service-set>
    <interface>interface</interface>
  </get-service-cos-statistics-information>
</rpc>
```

Description Show statistics.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<interface>—Name of adaptive services interface.

<service-set>—Name of service set.

<summary>—Display summary output.

<get-service-crtp-extensive-information>

Usage
```
<rpc>
  <get-service-crtp-extensive-information>
    <interface>interface</interface>
  </get-service-crtp-extensive-information>
</rpc>
```

Description Show CRTP extensive output.

Contents <interface>—Name of link services interface.

<get-service-crtp-flow-table-information>

Usage
```
<rpc>
  <get-service-crtp-flow-table-information>
    <interface>interface</interface>
  </get-service-crtp-flow-table-information>
</rpc>
```

Description Show CRTP flow table entries.

Contents <interface>—Name of link services interface.

<get-service-crtp-params-information>

Usage
```
<rpc>
  <get-service-crtp-params-information>
    <interface>interface</interface>
  </get-service-crtp-params-information>
</rpc>
```

Description Show Compressed Real-Time Protocol information.

Contents <interface>—Name of link services interface.

<get-service-deployment-service-information>

Usage
```
<rpc>
  <get-service-deployment-service-information/>
</rpc>
```

Description Show service deployment service information.

<get-service-identification-statistics-information>

Usage

```
<rpc>
  <get-service-identification-statistics-information>
    <detail/>
  </get-service-identification-statistics-information>
</rpc>
```

Description Show service identification statistics.

Contents <detail>—Display detailed statistics.

<get-service-ids-destination-table-information>

Usage

```
<rpc>
  <get-service-ids-destination-table-information>
    <destination-prefix>destination-prefix</destination-prefix>
    <service-set>service-set</service-set>
    <interface>interface</interface>
    <order>order-choice</order>
    <threshold>threshold</threshold>
    <limit>limit</limit>
    <extensive/>
    <brief/>
    <terse/>
  </get-service-ids-destination-table-information>
</rpc>
```

Description Show attack destination address table.

Contents <brief>—Display brief output (default).

<destination-prefix>—Destination prefix to use as filter.

<extensive>—Display extensive output.

<interface>—Name of adaptive services interface.

<limit>—Maximum number of entries to display.

<order>—Specify table ordering criteria.

- anomalies—Order by number of anomalies (default).
- bytes—Order by bytes received.
- flows—Order by number of flows.
- packets—Order by packets received.

<service-set>—Name of service set.

<terse>—Display terse output.

<threshold>—Minimum threshold for table entries.

<get-service-ids-pair-table-information>

Usage

```
<rpc>
  <get-service-ids-pair-table-information>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <service-set>service-set</service-set>
    <interface>interface</interface>
    <order>order-choice</order>
    <threshold>threshold</threshold>
    <limit>limit</limit>
    <extensive/>
    <brief/>
    <terse/>
  </get-service-ids-pair-table-information>
</rpc>
```

Description Show attack source and destination address pair table.

Contents <brief>—Display brief output (default).

<destination-prefix>—Destination prefix to use as filter.

<extensive>—Display extensive output.

<interface>—Name of adaptive services interface.

<limit>—Maximum number of entries to display.

<order>—Specify table ordering criteria.

- anomalies—Order by number of anomalies (default).
- bytes—Order by bytes received.
- flows—Order by number of flows.
- packets—Order by packets received.

<service-set>—Name of service set.

<source-prefix>—Source prefix to use as filter.

<terse>—Display terse output.

<threshold>—Minimum threshold for table entries.

<get-service-ids-source-table-information>

Usage

```
<rpc>
  <get-service-ids-source-table-information>
    <source-prefix>source-prefix</source-prefix>
    <service-set>service-set</service-set>
    <interface>interface</interface>
    <order>order-choice</order>
    <threshold>threshold</threshold>
    <limit>limit</limit>
    <extensive/>
    <brief/>
    <terse/>
  </get-service-ids-source-table-information>
</rpc>
```

Description Show attack source address table.

Contents <brief>—Display brief output (default).

<extensive>—Display extensive output.

<interface>—Name of adaptive services interface.

<limit>—Maximum number of entries to display.

<order>—Specify table ordering criteria.

- anomalies—Order by number of anomalies (default).
- bytes—Order by bytes received.
- flows—Order by number of flows.
- packets—Order by packets received.

<service-set>—Name of service set.

<source-prefix>—Source prefix to use as filter.

<terse>—Display terse output.

<threshold>—Minimum threshold for table entries.

<get-service-nat-ipv6-multicast-information>

Usage

```
<rpc>
  <get-service-nat-ipv6-multicast-information/>
</rpc>
```

Description Show interfaces with IPv6 multicast filter.

<get-service-nat-pool-information>

Usage

```
<rpc>
  <get-service-nat-pool-information>
    <pool-name>pool-name</pool-name>
    <brief/>
    <detail/>
  </get-service-nat-pool-information>
</rpc>
```

Description Show NAT pools information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<pool-name>—Name of pool.

<get-service-pgcp-conversation-information>

Usage

```
<rpc>
  <get-service-pgcp-conversation-information>
    <gateway-name>gateway-name</gateway-name>     <!-- mandatory -->
    <service-set>service-set</service-set>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <source-routing-instance>source-routing-instance</source-routing-instance>
    <destination-routing-instance>destination-routing-instance
                  </destination-routing-instance>
    <protocol>protocol-choice</protocol>
    <brief/>
    <extensive/>
  </get-service-pgcp-conversation-information>
</rpc>
```

Description Show PGCP conversations.

Contents <brief>—Display brief output.

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<destination-routing-instance>—Destination routing-instance.

<extensive>—Display extensive output.

<gateway-name>—Gateway name.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.
- ipip—IP in IP.
- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.

- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<source-routing-instance>—Source routing-instance.

<get-service-pgcp-flow-table-information>

Usage

```
<rpc>
  <get-service-pgcp-flow-table-information>
    <gateway-name>gateway-name</gateway-name>     <!-- mandatory -->
    <gate-id>gate-id</gate-id>
    <service-set>service-set</service-set>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <source-routing-instance>source-routing-instance</source-routing-instance>
    <destination-routing-instance>destination-routing-instance
                  </destination-routing-instance>
    <protocol>protocol-choice</protocol>
    <get-service-pgcp-flow-count-information/>
    <brief/>
    <extensive/>
  </get-service-pgcp-flow-table-information>
</rpc>
```

Description Show PGCP flow table entries.

Contents <brief>—Display brief output.

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<destination-routing-instance>—Destination routing-instance.

<extensive>—Display extensive output.

<gate-id>—Gate id.

<gateway-name>—Gateway name.

<get-service-pgcp-flow-count-information>—Show count of matching entries.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.
- ipip—IP in IP.

- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.
- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<source-routing-instance>—Source routing-instance.

<get-service-pgcp-gates>

Usage

```
<rpc>
  <get-service-pgcp-gates/>
</rpc>
```

Description Show list of gates.

<get-service-pgcp-gates-gate-id>

Usage

```
<rpc>
  <get-service-pgcp-gates-gate-id>
    <gate-id>gate-id</gate-id>     <!-- mandatory -->
    <extensive/>
    <brief/>
    <statistics/>
    <session-mirroring/>
  </get-service-pgcp-gates-gate-id>
</rpc>
```

Description Show specific gate.

Contents <brief>—Display brief output (default).

<extensive>—Display extensive output.

<gate-id>—Gate id.

<session-mirroring>—Display session mirroring for gate.

<statistics>—Display statistics for gate.

<get-service-pgcp-gates-gateway>

Usage

```
<rpc>
  <get-service-pgcp-gates-gateway>
    <gateway-name>gateway-name</gateway-name>     <!-- mandatory -->
    <extensive/>
    <brief/>
    <count/>
    <source-routing-instance>source-routing-instance</source-routing-instance>
    <destination-routing-instance>destination-routing-instance
                </destination-routing-instance>
  </get-service-pgcp-gates-gateway>
</rpc>
```

Description Show all gates for gateway.

Contents <brief>—Display brief output (default).

<count>—Show count of matching entries.

<destination-routing-instance>—Destination routing-instance.

<extensive>—Display extensive output.

<gateway-name>—Gateway name.

<source-routing-instance>—Source routing-instance.

<get-service-pgcp-statistics>

Usage

```
<rpc>
  <get-service-pgcp-statistics/>
</rpc>
```

Description Show pgcpd statistics.

<get-service-pgcp-statistics-gateway>

Usage

```
<rpc>
  <get-service-pgcp-statistics-gateway>
    <gateway-name>gateway-name</gateway-name>     <!-- mandatory -->
    <brief/>
    <extensive/>
  </get-service-pgcp-statistics-gateway>
</rpc>
```

Description Show gateway statistics.

Contents <brief>—Display brief output (default).

<extensive>—Display extensive output.

<gateway-name>—Gateway name.

<get-service-pgcp-terminations>

Usage

```
<rpc>
  <get-service-pgcp-terminations>
    <gateway-name>gateway-name</gateway-name>     <!-- mandatory -->
    <termination-prefix>termination-prefix</termination-prefix>
    <h248/>
    <brief/>
    <count/>
  </get-service-pgcp-terminations>
</rpc>
```

Description Show list of terminations.

Contents <brief>—Display brief output (default).

<count>—Show count of matching entries.

<gateway-name>—Gateway name.

<h248>—Display H248 output format.

<termination-prefix>—Termination-prefix to use as filter, default * (all).

<get-service-set-cpu-statistics>

Usage

```
<rpc>
  <get-service-set-cpu-statistics>
    <service-set>service-set</service-set>
    <interface>interface</interface>
  </get-service-set-cpu-statistics>
</rpc>
```

Description Show service interface CPU utilization as a percentage.

Contents <interface>—Name of adaptive services interface.

<service-set>—Name of service set.

<get-service-set-memory-statistics>

Usage

```
<rpc>
  <get-service-set-memory-statistics>
    <service-set>service-set</service-set>
    <interface>interface</interface>
  </get-service-set-memory-statistics>
</rpc>
```

Description Show service interface memory utilization.

Contents <interface>—Name of adaptive services interface.

<service-set>—Name of service set.

<get-service-set-packet-drop-statistics>

Usage

```
<rpc>
  <get-service-set-packet-drop-statistics>
    <interface>interface</interface>
  </get-service-set-packet-drop-statistics>
</rpc>
```

Description Show service set packet drop statistics.

Contents <interface>—Name of adaptive services interface.

<get-service-set-summary-information>

Usage

```
<rpc>
  <get-service-set-summary-information>
    <interface>interface</interface>
  </get-service-set-summary-information>
</rpc>
```

Description Show service set summary information.

Contents <interface>—Name of adaptive services interface.

<get-service-sfw-conversation-information>

Usage

```
<rpc>
  <get-service-sfw-conversation-information>
    <limit>limit</limit>
    <extensive/>
    <brief/>
    <terse/>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <protocol>protocol-choice</protocol>
    <application-protocol>application-protocol-choice</application-protocol>
    <service-set>service-set</service-set>
    <interface>interface</interface>
    <pgcp/>
  </get-service-sfw-conversation-information>
</rpc>
```

Description Show conversations.

Contents <application-protocol>—Application protocol type to use as filter.

- bootp—Bootstrap protocol.
- dce-rpc—DCE RPC.
- dce-rpc-portmap—DCE RPC portmap.
- dns—Domain Name Service.
- exec—Remote Execution Protocol.
- ftp—File Transfer Protocol.
- h323—H.323.
- icmp—ICMP.
- ignore—Ignore application type.
- iiop—Internet Inter-ORB Protocol.
- ip—IP.
- login—Login.
- mgcp-ca—MGCP-CA.
- mgcp-ua—MGCP-UA.
- ms-rpc—Microsoft RPC.
- netbios—NetBIOS.

- netshow—NetShow.
- pptp—Point-to-Point Tunneling Protocol.
- q931—Q.931.
- ras—RAS.
- realaudio—RealAudio.
- rpc—RPC.
- rpc-portmap—RPC portmap.
- rsh—Remote Shell.
- rtsp—Real Time Streaming Protocol.
- sccp—Skinny Client Control Protocol.
- shell—Shell.
- sip—Session Initiation Protocol.
- snmp—SNMP.
- sqlnet—SQLNet.
- sqlnet-v2—Oracle SQL*Net Version 2.
- sun-rpc—Sun Microsystems RPC.
- talk—Talk Program.
- tftp—Trivial File Transfer Protocol.
- traceroute—Traceroute.
- winframe—WinFrame.

<brief>—Display brief output (default).

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<extensive>—Display extensive output.

<interface>—Name of adaptive services interface.

<limit>—Maximum number of entries to display.

<pgcp>—Use pgcp flow type as filter.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.
- ipip—IP in IP.
- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.
- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<terse>—Display terse output.

<get-service-sfw-flow-table-information>

Usage

```
<rpc>
  <get-service-sfw-flow-table-information>
    <limit>limit</limit>
    <extensive/>
    <brief/>
    <terse/>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <protocol>protocol-choice</protocol>
    <application-protocol>application-protocol-choice
                </application-protocol>
    <service-set>service-set</service-set>
    <interface>interface</interface>
    <pgcp/>
    <get-service-sfw-flow-count-information/>
  </get-service-sfw-flow-table-information>
</rpc>
```

Description Show flow table entries.

Contents <application-protocol>—Application protocol type to use as filter.

- bootp—Bootstrap protocol.
- dce-rpc—DCE RPC.
- dce-rpc-portmap—DCE RPC portmap.
- dns—Domain Name Service.
- exec—Remote Execution Protocol.
- ftp—File Transfer Protocol.
- h323—H.323.
- icmp—ICMP.
- ignore—Ignore application type.
- iiop—Internet Inter-ORB Protocol.
- ip—IP.
- login—Login.
- mgcp-ca—MGCP-CA.
- mgcp-ua—MGCP-UA.
- ms-rpc—Microsoft RPC.

- netbios—NetBIOS.
- netshow—NetShow.
- pptp—Point-to-Point Tunneling Protocol.
- q931—Q.931.
- ras—RAS.
- realaudio—RealAudio.
- rpc—RPC.
- rpc-portmap—RPC portmap.
- rsh—Remote Shell.
- rtsp—Real Time Streaming Protocol.
- sccp—Skinny Client Control Protocol.
- shell—Shell.
- sip—Session Initiation Protocol.
- snmp—SNMP.
- sqlnet—SQLNet.
- sqlnet-v2—Oracle SQL*Net Version 2.
- sun-rpc—Sun Microsystems RPC.
- talk—Talk Program.
- tftp—Trivial File Transfer Protocol.
- traceroute—Traceroute.
- winframe—WinFrame.

<brief>—Display brief output (default).

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<extensive>—Display extensive output.

<get-service-sfw-flow-count-information>—Show count of matching entries.

<interface>—Name of adaptive services interface.

<limit>—Maximum number of entries to display.

<pgcp>—Use pgcp flow type as filter.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.
- ipip—IP in IP.
- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.
- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<terse>—Display terse output.

<get-service-sfw-sip-call-information>

Usage

```
<rpc>
  <get-service-sfw-sip-call-information>
    <limit>limit</limit>
    <extensive/>
    <brief/>
    <terse/>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <protocol>protocol-choice</protocol>
    <application-protocol>application-protocol-choice
                </application-protocol>
    <service-set>service-set</service-set>
    <interface>interface</interface>
    <get-service-sfw-sip-call-count-information/>
  </get-service-sfw-sip-call-information>
</rpc>
```

Description Show SIP call information.

Contents <application-protocol>—Application protocol type to use as filter.

- bootp—Bootstrap protocol.
- dce-rpc—DCE RPC.
- dce-rpc-portmap—DCE RPC portmap.
- dns—Domain Name Service.
- exec—Remote Execution Protocol.
- ftp—File Transfer Protocol.
- h323—H.323.
- icmp—ICMP.
- ignore—Ignore application type.
- iiop—Internet Inter-ORB Protocol.
- ip—IP.
- login—Login.
- mgcp-ca—MGCP-CA.
- mgcp-ua—MGCP-UA.
- ms-rpc—Microsoft RPC.

- netbios—NetBIOS.
- netshow—NetShow.
- pptp—Point-to-Point Tunneling Protocol.
- q931—Q.931.
- ras—RAS.
- realaudio—RealAudio.
- rpc—RPC.
- rpc-portmap—RPC portmap.
- rsh—Remote Shell.
- rtsp—Real Time Streaming Protocol.
- sccp—Skinny Client Control Protocol.
- shell—Shell.
- sip—Session Initiation Protocol.
- snmp—SNMP.
- sqlnet—SQLNet.
- sqlnet-v2—Oracle SQL*Net Version 2.
- sun-rpc—Sun Microsystems RPC.
- talk—Talk Program.
- tftp—Trivial File Transfer Protocol.
- traceroute—Traceroute.
- winframe—WinFrame.

<brief>—Display brief output (default).

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<extensive>—Display extensive output.

<get-service-sfw-sip-call-count-information>—Show count of matching entries.

<interface>—Name of adaptive services interface.

<limit>—Maximum number of entries to display.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.
- ipip—IP in IP.
- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.
- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<terse>—Display terse output.

<get-service-sfw-sip-register-information>

Usage

```
<rpc>
  <get-service-sfw-sip-register-information>
    <limit>limit</limit>
    <extensive/>
    <brief/>
    <terse/>
    <source-prefix>source-prefix</source-prefix>
    <destination-prefix>destination-prefix</destination-prefix>
    <source-port>source-port</source-port>
    <destination-port>destination-port</destination-port>
    <protocol>protocol-choice</protocol>
    <application-protocol>application-protocol-choice
                </application-protocol>
    <service-set>service-set</service-set>
    <interface>interface</interface>
    <get-service-sfw-sip-register-count-information/>
  </get-service-sfw-sip-register-information>
</rpc>
```

Description Show SIP register information.

Contents <application-protocol>—Application protocol type to use as filter.

- bootp—Bootstrap protocol.
- dce-rpc—DCE RPC.
- dce-rpc-portmap—DCE RPC portmap.
- dns—Domain Name Service.
- exec—Remote Execution Protocol.
- ftp—File Transfer Protocol.
- h323—H.323.
- icmp—ICMP.
- ignore—Ignore application type.
- iiop—Internet Inter-ORB Protocol.
- ip—IP.
- login—Login.
- mgcp-ca—MGCP-CA.
- mgcp-ua—MGCP-UA.
- ms-rpc—Microsoft RPC.

- netbios—NetBIOS.
- netshow—NetShow.
- pptp—Point-to-Point Tunneling Protocol.
- q931—Q.931.
- ras—RAS.
- realaudio—RealAudio.
- rpc—RPC.
- rpc-portmap—RPC portmap.
- rsh—Remote Shell.
- rtsp—Real Time Streaming Protocol.
- sccp—Skinny Client Control Protocol.
- shell—Shell.
- sip—Session Initiation Protocol.
- snmp—SNMP.
- sqlnet—SQLNet.
- sqlnet-v2—Oracle SQL*Net Version 2.
- sun-rpc—Sun Microsystems RPC.
- talk—Talk Program.
- tftp—Trivial File Transfer Protocol.
- traceroute—Traceroute.
- winframe—WinFrame.

<brief>—Display brief output (default).

<destination-port>—Destination port to use as filter.

<destination-prefix>—Destination prefix to use as filter.

<extensive>—Display extensive output.

<get-service-sfw-sip-register-count-information>—Show count of matching entries.

<interface>—Name of adaptive services interface.

<limit>—Maximum number of entries to display.

<protocol>—IP protocol type to use as filter.

- ah—IP Security authentication header.
- egp—Exterior gateway protocol.
- esp—IPSec Encapsulating Security Payload.
- gre—Generic routing encapsulation.
- icmp—Internet Control Message Protocol.
- igmp—Internet Group Management Protocol.
- ipip—IP in IP.
- number—Numeric protocol value (0 .. 255).
- ospf—Open Shortest Path First.
- pim—Protocol Independent Multicast.
- rsvp—Resource Reservation Protocol.
- sctp—Stream Control Transmission Protocol.
- tcp—Transmission Control Protocol.
- udp—User Datagram Protocol.

<service-set>—Name of service set.

<source-port>—Source port to use as filter.

<source-prefix>—Source prefix to use as filter.

<terse>—Display terse output.

<get-service-sfw-statistics-information>

Usage

```
<rpc>
  <get-service-sfw-statistics-information>
    <brief/>
    <detail/>
    <extensive/>
    <summary/>
    <service-set>service-set</service-set>
    <interface>interface</interface>
  </get-service-sfw-statistics-information>
</rpc>
```

Description Show statistics.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<interface>—Name of adaptive services interface.

<service-set>—Name of service set.

<summary>—Display summary output.

<get-services-dynamic-flow-capture-content-destination-information>

Usage

```
<rpc>
  <get-services-dynamic-flow-capture-content-destination-information>
    <terse/>
    <capture-group>capture-group</capture-group>     <!-- mandatory -->
    <destination-identifier>destination-identifier</destination-identifier>     <!--
mandatory -->
  </get-services-dynamic-flow-capture-content-destination-information>
</rpc>
```

Description Show DFC content destination information.

Contents <capture-group>—Capture group name.

<destination-identifier>—Content destination identifier.

<terse>—Display terse output (default).

<get-services-dynamic-flow-capture-control-source-information>

Usage

```
<rpc>
  <get-services-dynamic-flow-capture-control-source-information>
    <detail/>
    <terse/>
    <capture-group>capture-group</capture-group>      <!-- mandatory -->
    <source-identifier>source-identifier</source-identifier>      <!-- mandatory -->
  </get-services-dynamic-flow-capture-control-source-information>
</rpc>
```

Description Show DFC control source information.

Contents <capture-group>—Capture group name.

<detail>—Display detailed output.

<source-identifier>—Control source identifier.

<terse>—Display terse output (default).

<get-services-flow-collector-file-information>

Usage

```
<rpc>
  <get-services-flow-collector-file-information>
    <interface>interface-choice</interface>      <!-- mandatory -->
    <extensive/>
    <detail/>
    <terse/>
  </get-services-flow-collector-file-information>
</rpc>
```

Description Show file status information.

Contents <detail>—Display detailed output.

<extensive>—Display extensive output.

<interface>—Interface name.

- all—All configured Collector PICs.
- interface—Physical interface.

<terse>—Display terse output (default).

<get-services-flow-collector-information>

Usage

```
<rpc>
  <get-services-flow-collector-information>
    <extensive/>
    <detail/>
    <terse/>
    <interface>interface-choice</interface>     <!-- mandatory -->
  </get-services-flow-collector-information>
</rpc>
```

Description Show flow collector service information.

Contents <detail>—Display detailed output.

<extensive>—Display extensive output.

<interface>—Interface name.

- all—All configured Collector PICs.
- interface—Physical interface.

<terse>—Display terse output (default).

<get-services-flow-collector-input-information>

Usage

```
<rpc>
  <get-services-flow-collector-input-information>
    <interface>interface-choice</interface>     <!-- mandatory -->
    <extensive/>
    <detail/>
    <terse/>
  </get-services-flow-collector-input-information>
</rpc>
```

Description Show input status information.

Contents <detail>—Display detailed output.

<extensive>—Display extensive output.

<interface>—Interface name.

- all—All configured Collector PICs.
- interface—Physical interface.

<terse>—Display terse output (default).

<get-services-ipsec-statistics-information>

Usage
```
<rpc>
  <get-services-ipsec-statistics-information>
    <remote-gw>remote-gw</remote-gw>
    <detail/>
    <brief/>
    <service-set>service-set</service-set>
  </get-services-ipsec-statistics-information>
</rpc>
```

Description Show IPSec statistics.

Contents <brief>—Display accumulated statistics (default).

<detail>—Display all tunnels.

<remote-gw>—Peer address to use as filter.

<service-set>—Name of service set.

<get-services-l2tp-radius-accounting-servers-information>

Usage
```
<rpc>
  <get-services-l2tp-radius-accounting-servers-information/>
</rpc>
```

Description Show RADIUS accounting servers information.

<get-services-l2tp-radius-accounting-statistics-information>

Usage
```
<rpc>
  <get-services-l2tp-radius-accounting-statistics-information/>
</rpc>
```

Description Show RADIUS accounting statistics information.

<get-services-l2tp-radius-authentication-accounting-servers-information>

Usage
```
<rpc>
  <get-services-l2tp-radius-authentication-accounting-servers-information/>
</rpc>
```

Description Show RADIUS authentication and accounting servers information.

<get-services-l2tp-radius-authentication-accounting-statistics-information>

Usage

```
<rpc>
  <get-services-l2tp-radius-authentication-accounting-statistics-information/>
</rpc>
```

Description Show RADIUS authentication and accounting statistics information.

<get-services-l2tp-radius-authentication-servers-information>

Usage

```
<rpc>
  <get-services-l2tp-radius-authentication-servers-information/>
</rpc>
```

Description Show RADIUS authentication servers information.

<get-services-l2tp-radius-authentication-statistics-information>

Usage

```
<rpc>
  <get-services-l2tp-radius-authentication-statistics-information/>
</rpc>
```

Description Show RADIUS authentication statistics information.

<get-services-pgcpd-root-termination>

Usage

```
<rpc>
  <get-services-pgcpd-root-termination>
    <gateway-name>gateway-name</gateway-name>     <!-- mandatory -->
  </get-services-pgcpd-root-termination>
</rpc>
```

Description Show root termination h248 information.

Contents <gateway-name>—Gateway name.

<get-services-security-associations-information>

Usage

```
<rpc>
  <get-services-security-associations-information>
    <brief/>
    <detail/>
    <extensive/>
    <service-set>service-set</service-set>
  </get-services-security-associations-information>
</rpc>
```

Description Show IPSec security association information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<service-set>—Restrict output to one service set.

<get-sfm-information>

Usage

```
<rpc>
  <get-sfm-information/>
</rpc>
```

Description Show Switching and Forwarding Module status.

<get-show-bridge-domain-all-ce-flood-route-information>

Usage

```
<rpc>
  <get-show-bridge-domain-all-ce-flood-route-information>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
  </get-show-bridge-domain-all-ce-flood-route-information>
</rpc>
```

Description Show route for flooding traffic to all CE routers if no-local-switching is enabled.

Contents <bridge-domain>—Display information for a specified bridge domain.

<instance>—Display information for a specified instance.

<get-show-bridge-domain-ve-flood-route-information>

Usage

```
<rpc>
  <get-show-bridge-domain-ve-flood-route-information>
    <instance>instance</instance>
    <bridge-domain>bridge-domain</bridge-domain>
  </get-show-bridge-domain-ve-flood-route-information>
</rpc>
```

Description Show route for flooding traffic to all VE routers if no-local-switching is enabled.

Contents <bridge-domain>—Display information for a specified bridge domain.

<instance>—Display information for a specified instance.

<get-sib-information>

Usage

```
<rpc>
  <get-sib-information/>
</rpc>
```

Description Show Switch Interface Board status.

<get-snapshot-information>

Usage

```
<rpc>
  <get-snapshot-information>
    <media>media-choice</media>
  </get-snapshot-information>
</rpc>
```

Description Show snapshot information.

Contents <media>—Media to show snapshot information from.

- compact-flash—Show snapshot information from compact flash.
- removable-compact-flash—Show snapshot information from removable compact flash.
- usb—Show snapshot information from device connected to USB port.

<get-snmp-inform-statistics>

Usage

```
<rpc>
  <get-snmp-inform-statistics/>
</rpc>
```

Description Show SNMP Inform request statistics.

<get-snmp-information>

Usage
```
<rpc>
  <get-snmp-information/>
</rpc>
```

Description Show SNMP statistics.

<get-snmp-object>

Usage
```
<rpc>
  <get-snmp-object>
    <snmp-object-name>snmp-object-name</snmp-object-name>     <!-- mandatory -->
  </get-snmp-object>
</rpc>
```

Description Get SNMP object value.

Contents <snmp-object-name>—No documentation is available yet.

<get-snmp-v3-access-information>

Usage
```
<rpc>
  <get-snmp-v3-access-information>
    <brief/>
    <detail/>
  </get-snmp-v3-access-information>
</rpc>
```

Description Show SNMPv3 access information.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<get-snmp-v3-community-information>

Usage
```
<rpc>
  <get-snmp-v3-community-information/>
</rpc>
```

Description Show SNMPv3 community information.

<get-snmp-v3-general-information>

Usage
```
<rpc>
  <get-snmp-v3-general-information/>
</rpc>
```

Description Show general SNMPv3 information.

<get-snmp-v3-group-information>

Usage
```
<rpc>
  <get-snmp-v3-group-information/>
</rpc>
```

Description Show SNMPv3 security-to-group information.

<get-snmp-v3-information>

Usage
```
<rpc>
  <get-snmp-v3-information/>
</rpc>
```

Description Show SNMP version 3 information.

<get-snmp-v3-notify-filter-information>

Usage
```
<rpc>
  <get-snmp-v3-notify-filter-information/>
</rpc>
```

Description Show SNMPv3 notify filter information.

<get-snmp-v3-notify-information>

Usage
```
<rpc>
  <get-snmp-v3-notify-information/>
</rpc>
```

Description Show SNMPv3 notify information.

<get-snmp-v3-target-address-information>

Usage
```
<rpc>
  <get-snmp-v3-target-address-information/>
</rpc>
```

Description Show SNMPv3 target address information.

<get-snmp-v3-target-information>

Usage
```
<rpc>
  <get-snmp-v3-target-information/>
</rpc>
```

Description Show SNMPv3 target information.

<get-snmp-v3-target-parameters-information>

Usage
```
<rpc>
  <get-snmp-v3-target-parameters-information/>
</rpc>
```

Description Show SNMPv3 target parameters information.

<get-snmp-v3-usm-user-information>

Usage
```
<rpc>
  <get-snmp-v3-usm-user-information/>
</rpc>
```

Description Show SNMPv3 user information.

<get-software-information>

Usage
```
<rpc>
  <get-software-information>
    <brief/>
    <detail/>
  </get-software-information>
</rpc>
```

Description Show software process revision levels.

Contents <brief>—Display brief output.

<detail>—Display detailed output.

<get-software-installation-status>

Usage
```
<rpc>
  <get-software-installation-status/>
</rpc>
```

Description Show status of software installation.

<get-source-class-statistics>

Usage
```
<rpc>
  <get-source-class-statistics>
    <class-name>class-name</class-name>     <!-- mandatory -->
    <interface-name>interface-name</interface-name>
  </get-source-class-statistics>
</rpc>
```

Description Show statistics for source class.

Contents <class-name>—Name of source class.

<interface-name>—Name of logical interface.

<get-spmb-information>

Usage
```
<rpc>
  <get-spmb-information/>
</rpc>
```

Description Show Switch Processor Mezzanine Board status.

<get-spmb-sib-information>

Usage
```
<rpc>
  <get-spmb-sib-information/>
</rpc>
```

Description Show Switch Interface Board status.

<get-ssb-information>

Usage
```
<rpc>
  <get-ssb-information>
    <slot>slot</slot>
  </get-ssb-information>
</rpc>
```

Description Show System and Switch Board status.

Contents <slot>—SSB slot number.

<get-subscribers>

Usage

```
<rpc>
  <get-subscribers>
    <address>address</address>
    <interface>interface</interface>
    <logical-system>logical-system</logical-system>
    <routing-instance>routing-instance</routing-instance>
    <profile-name>profile-name</profile-name>
    <terse/>
    <detail/>
    <count/>
  </get-subscribers>
</rpc>
```

Description Show subscriber information.

Contents <address>—IPv4 or IPv6 address of subscriber.

<count>—Display number of active subscribers.

<detail>—Display detailed output.

<interface>—Interface name, or with wildcards (e.g. fe-0/0/*, fe-0/*/*).

<logical-system>—Logical system where subscriber resides.

<profile-name>—Profile with which subscrier has been activated.

<routing-instance>—Routing instance where subscriber resides.

<terse>—Display terse output.

<get-summary-mip-binding-information>

Usage

```
<rpc>
  <get-summary-mip-binding-information/>
</rpc>
```

Description Show summary of binding table.

<get-switchover-information>

Usage

```
<rpc>
  <get-switchover-information/>
</rpc>
```

Description Show Routing Engine graceful switchover information.

<get-syslog-events>

Usage

```
<rpc>
  <get-syslog-events>
    <stream>stream</stream>     <!-- mandatory -->
    <event>event</event>
    <process>process</process>
    <priority>...</priority>
    <host>host</host>
    <start-time>start-time</start-time>
    <stop-time>stop-time</stop-time>
    <parameter>...</parameter>
    <text-pattern>text-pattern</text-pattern>
    <count>count</count>
    <recorded/>
  </get-syslog-events>
</rpc>
```

Description Show system log messages.

Contents <count>—Number of messages to include in output.

<event>—Event ID of messages to include in output.

<host>—Name of host generating messages to include in output.

<parameter>—Parameter (key = value) of messages to include in output.

<priority>—Facility and severity of messages to include in output.

<process>—Name of process generating messages to include in output.

<recorded>—Match only the recorded messages.

<start-time>—Earliest timestamp of messages to include in output.

<stop-time>—Latest timestamp of messages to include in output.

<stream>—Name of stream (log file) containing messages to filter.

<text-pattern>—Pattern in messages to include in output.

<get-syslog-filenames>

Usage

```
<rpc>
  <get-syslog-filenames/>
</rpc>
```

Description Get syslog file names.

<get-syslog-tag-information>

Usage
```
<rpc>
  <get-syslog-tag-information>
    <syslog-tag>syslog-tag</syslog-tag>
  </get-syslog-tag-information>
</rpc>
```

Description System log error messages.

Contents <syslog-tag>—System log tag or regular expression.

<get-system-alarm-information>

Usage
```
<rpc>
  <get-system-alarm-information/>
</rpc>
```

Description Show system alarm status.

<get-system-archival>

Usage
```
<rpc>
  <get-system-archival/>
</rpc>
```

Description List files queued up for archive transfer.

<get-system-firmware-information>

Usage
```
<rpc>
  <get-system-firmware-information>
    <compatibility/>
  </get-system-firmware-information>
</rpc>
```

Description Show all firmware version information.

Contents <compatibility>—Show all firmware compatibility information.

<get-system-resource-cleanup-processes-information>

Usage
```
<rpc>
  <get-system-resource-cleanup-processes-information>
    <detail/>
    <process-name>process-name</process-name>
    <pid>pid</pid>
  </get-system-resource-cleanup-processes-information>
</rpc>
```

Description Show process resource cleanup information.

Contents <detail>—Display detailed information.

<pid>—Process identifier.

<process-name>—Process name.

<get-system-storage>

Usage
```
<rpc>
  <get-system-storage>
    <detail/>
  </get-system-storage>
</rpc>
```

Description Show local storage data.

Contents <detail>—No documentation is available yet.

<get-system-uptime-information>

Usage
```
<rpc>
  <get-system-uptime-information/>
</rpc>
```

Description Show time since system and processes started.

<get-system-users-information>

Usage
```
<rpc>
  <get-system-users-information>
    <no-resolve/>
  </get-system-users-information>
</rpc>
```

Description Show users who are currently logged in.

Contents <no-resolve>—Don't attempt to print addresses symbolically.

<get-ted-database-information>

Usage

```
<rpc>
  <get-ted-database-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
    <extensive/>
    <system-id>system-id</system-id>
  </get-ted-database-information>
</rpc>
```

Description Show current Traffic Engineering Database.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<extensive>—Display extensive output.

<logical-system>—Name of logical system, or 'all'.

<system-id>—System ID or node ID.

<get-ted-link-information>

Usage

```
<rpc>
  <get-ted-link-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
  </get-ted-link-information>
</rpc>
```

Description Show current Traffic Engineering Database link.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<get-ted-protocol-information>

Usage

```
<rpc>
  <get-ted-protocol-information>
    <logical-system>logical-system</logical-system>
    <brief/>
    <detail/>
  </get-ted-protocol-information>
</rpc>
```

Description Show current contributing protocols.

Contents <brief>—Display brief output (default).

<detail>—Display detailed output.

<logical-system>—Name of logical system, or 'all'.

<get-temperature-threshold-information>

Usage

```
<rpc>
  <get-temperature-threshold-information/>
</rpc>
```

Description Show chassis temperature threshold settings.

<get-uri-redirect-set-statistics-information>

Usage

```
<rpc>
  <get-uri-redirect-set-statistics-information>
    <detail/>
  </get-uri-redirect-set-statistics-information>
</rpc>
```

Description Show URI redirect set statistics.

Contents <detail>—Display detailed statistics.

<get-vcpu-information>

Usage

```
<rpc>
  <get-vcpu-information>
    <detail/>
    <slot>slot</slot>
  </get-vcpu-information>
</rpc>
```

Description Show Visibility CPU status.

Contents <detail>—Display detailed output.

<slot>—VCPU slot number.

<get-vpls-all-ce-flood-route-information>

Usage

```
<rpc>
  <get-vpls-all-ce-flood-route-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>     <!-- mandatory -->
  </get-vpls-all-ce-flood-route-information>
</rpc>
```

Description Show route for flooding traffic to all CE routers.

Contents <instance>—Display information for a specified vpls.

<logical-system>—Name of logical system.

<get-vpls-all-flood-route-information>

Usage

```
<rpc>
  <get-vpls-all-flood-route-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>     <!-- mandatory -->
  </get-vpls-all-flood-route-information>
</rpc>
```

Description Show route for flooding traffic from customer edge router.

Contents <instance>—Display information for a specified vpls.

<logical-system>—Name of logical system.

<get-vpls-alt-root-flood-route-information>

Usage
```
<rpc>
  <get-vpls-alt-root-flood-route-information>
    <interface>interface</interface>     <!-- mandatory -->
  </get-vpls-alt-root-flood-route-information>
</rpc>
```

Description Show STP alt-root flooding route used for interface.

Contents <interface>—Interface for which to show alternate-root flooding route.

<get-vpls-ce-flood-route-information>

Usage
```
<rpc>
  <get-vpls-ce-flood-route-information>
    <interface>interface</interface>     <!-- mandatory -->
  </get-vpls-ce-flood-route-information>
</rpc>
```

Description Show customer edge flood route.

Contents <interface>—Interface for which to show CE flood route.

<get-vpls-connection-information>

Usage

```
<rpc>
  <get-vpls-connection-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
    <local-site>local-site</local-site>
    <remote-site>remote-site</remote-site>
    <down/>
    <up/>
    <up-down/>
    <brief/>
    <extensive/>
    <history/>
    <status/>
    <summary/>
  </get-vpls-connection-information>
</rpc>
```

Description Show VPLS connections information.

Contents <brief>—Display one-line version of output.

<down>—Display nonoperational connections.

<extensive>—Display connection status and history.

<history>—Display connection history.

<instance>—Name of VPLS instance.

<local-site>—Name or ID of VPLS local site.

<logical-system>—Name of logical system, or 'all'.

<remote-site>—ID of VPLS remote site.

<status>—Display connection and circuit status (default).

<summary>—Display summary output.

<up>—Display operational connections.

<up-down>—Display both non- and operational connections (default).

<get-vpls-event-queue-information>

Usage

```
<rpc>
  <get-vpls-event-queue-information/>
</rpc>
```

Description Show queue of pending VPLS flood events.

<get-vpls-interface-mac-table>

Usage

```
<rpc>
  <get-vpls-interface-mac-table>
    <interface-name>interface-name</interface-name>
    <all/>
    <detail/>
    <brief/>
    <extensive/>
    <count/>
  </get-vpls-interface-mac-table>
</rpc>
```

Description Display MAC table for a specified interface.

Contents <all>—Display MAC table for all the interfaces.

<brief>—Display brief output.

<count>—Display count only.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<interface-name>—Name of interface for which to display table.

<get-vpls-mac-table>

Usage

```
<rpc>
  <get-vpls-mac-table>
    <instance>instance</instance>
    <logical-system>logical-system</logical-system>
    <vlan-id>vlan-id-choice</vlan-id>
    <address>address</address>
    <detail/>
    <brief/>
    <extensive/>
    <count/>
  </get-vpls-mac-table>
</rpc>
```

Description Show media access control table.

Contents <address>—MAC address.

<brief>—Display brief output.

<count>—Display count only.

<detail>—Display detailed output.

<extensive>—Display extensive output.

<instance>—Display information for a specified vpls.

<logical-system>—Name of logical system, or 'all'.

<vlan-id>—Display MAC address learned on a specified VLAN.

- all-vlan—Display MAC addresses on all VLAN(s).
- vlan-id—Display MAC address learned on a specified VLAN.

<get-vpls-mlp-flood-route-information>

Usage

```
<rpc>
  <get-vpls-mlp-flood-route-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>     <!-- mandatory -->
  </get-vpls-mlp-flood-route-information>
</rpc>
```

Description Show route for flooding traffic to MAC learning chips.

Contents <instance>—Display information for a specified vpls.

<logical-system>—Name of logical system.

<get-vpls-re-flood-route-information>

Usage
```
<rpc>
  <get-vpls-re-flood-route-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>     <!-- mandatory -->
  </get-vpls-re-flood-route-information>
</rpc>
```

Description Show route for Routing Engine flooding to all interfaces.

Contents <instance>—Display information for a specified vpls.

<logical-system>—Name of logical system.

<get-vpls-statistics-information>

Usage
```
<rpc>
  <get-vpls-statistics-information>
    <logical-system>logical-system</logical-system>
    <instance>instance</instance>
  </get-vpls-statistics-information>
</rpc>
```

Description Show VPLS statistics information.

Contents <instance>—Name of VPLS instance.

<logical-system>—Name of logical system, or 'all'.

<next-snmp-object>

Usage
```
<rpc>
  <next-snmp-object>
    <snmp-object-name>snmp-object-name</snmp-object-name>     <!-- mandatory -->
  </next-snmp-object>
</rpc>
```

Description Get next SNMP object value.

Contents <snmp-object-name>—No documentation is available yet.

<node-secret-file-table>

Usage
```
<rpc>
  <node-secret-file-table/>
</rpc>
```

Description Show SecurID server's node secret file path.

<op-script>

Usage

```
<rpc>
  <op-script>
    <script>script</script>     <!-- mandatory -->
    <detail/>
  </op-script>
</rpc>
```

Description Invoke an operation script.

Contents <detail>—Display detailed output.

<script>—Name of script to run.

<ping>

Usage

```
<rpc>
  <ping>
    <count>packets</count>
    <wait>seconds</wait>
    <no-resolve/>
    <rapid/>
    <record-route/>
    <detail/>
    <do-not-fragment/>
    <loose-source>...</loose-source>
    <interface>interface</interface>
    <interval>seconds</interval>
    <source>source</source>
    <pattern>pattern</pattern>
    <size>bytes</size>
    <strict/>
    <strict-source>...</strict-source>
    <ttl>hops</ttl>
    <verbose/>
    <tos>tos</tos>
    <bypass-routing/>
    <inet/>
    <inet6/>
    <routing-instance>routing-instance</routing-instance>
    <host>host</host>      <!-- mandatory -->
    <logical-system>logical-system</logical-system>
  </ping>
</rpc>
```

Description Ping remote target.

Contents <bypass-routing>—Bypass routing table, use specified interface.

<count>—Number of ping requests to send.

<detail>—Display incoming interface of received packet.

<do-not-fragment>—Don't fragment echo request packets (IPv4).

<host>—Hostname or IP address of remote host.

<inet>—Force ping to IPv4 destination.

<inet6>—Force ping to IPv6 destination.

<interface>—Source interface (multicast, all-ones, unrouted packets).

<interval>—Delay between ping requests.

<logical-system>—Name of logical system.

<loose-source>—Intermediate loose source route entry (IPv4).

<no-resolve>—Don't attempt to print addresses symbolically.

<pattern>—Hexadecimal fill pattern.

<rapid>—Send requests rapidly (default count of 5).

<record-route>—Record and report packet's path (IPv4).

<routing-instance>—Routing instance for ping attempt.

<size>—Size of request packets.

<source>—Source address of echo request.

<strict>—Use strict source route option (IPv4).

<strict-source>—Intermediate strict source route entry (IPv4).

<tos>—IP type-of-service value.

<ttl>—IP time-to-live value (IPv6 hop-limit value).

<verbose>—Display detailed output.

<wait>—Delay after sending last packet.

<reload-event-scripts>

Usage
```
<rpc>
  <reload-event-scripts/>
</rpc>
```

Description Reload all existing event-scripts.

<request-delete-rescue-configuration>

Usage
```
<rpc>
  <request-delete-rescue-configuration/>
</rpc>
```

Description Delete the rescue configuration.

<request-end-session>

Usage
```
<rpc>
  <request-end-session/>
</rpc>
```

Description Exit the management session.

<request-feb>

Usage
```
<rpc>
  <request-feb>
    <slot>slot</slot>     <!-- mandatory -->
    <offline/>
    <online/>
    <restart/>
  </request-feb>
</rpc>
```

Description Change Forwarding Engine Board status.

Contents <offline>—Take FEB offline.

<online>—Bring FEB online.

<restart>—Restart FEB.

<slot>—FEB slot number.

<request-ggsn-restart-interface>

Usage
```
<rpc>
  <request-ggsn-restart-interface>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </request-ggsn-restart-interface>
</rpc>
```

Description Restart GGSN service interface.

Contents <interface-name>—Name of GGSN service interface.

<request-ggsn-restart-node>

Usage
```
<rpc>
  <request-ggsn-restart-node/>
</rpc>
```

Description Restart GGSN node activity.

<request-ggsn-software-update>

Usage
```
<rpc>
  <request-ggsn-software-update/>
</rpc>
```

Description Start GGSN in service update.

<request-ggsn-start-imsi-trace>

Usage
```
<rpc>
  <request-ggsn-start-imsi-trace>
    <imsi-identifier>imsi-identifier</imsi-identifier>     <!-- mandatory -->
  </request-ggsn-start-imsi-trace>
</rpc>
```

Description Start tracing International Mobile Subscriber Identity.

Contents <imsi-identifier>—Identifier for IMSI.

<request-ggsn-start-msisdn-trace>

Usage
```
<rpc>
  <request-ggsn-start-msisdn-trace>
    <msisdn-identifier>msisdn-identifier</msisdn-identifier>     <!-- mandatory -->
  </request-ggsn-start-msisdn-trace>
</rpc>
```

Description Start tracing Mobile Station Integrated Services Digital Network.

Contents <msisdn-identifier>—Identifier for MSISDN.

<request-ggsn-stop-imsi-trace>

Usage
```
<rpc>
  <request-ggsn-stop-imsi-trace>
    <imsi-identifier>imsi-identifier</imsi-identifier>     <!-- mandatory -->
  </request-ggsn-stop-imsi-trace>
</rpc>
```

Description Stop tracing International Mobile Subscriber Identity.

Contents <imsi-identifier>—Identifier for IMSI.

<request-ggsn-stop-interface>

Usage
```
<rpc>
  <request-ggsn-stop-interface>
    <interface-name>interface-name</interface-name>     <!-- mandatory -->
  </request-ggsn-stop-interface>
</rpc>
```

Description Stop GGSN service interface.

Contents <interface-name>—Name of GGSN service interface.

<request-ggsn-stop-msisdn-trace>

Usage

```
<rpc>
  <request-ggsn-stop-msisdn-trace>
    <msisdn-identifier>msisdn-identifier</msisdn-identifier>     <!-- mandatory -->
  </request-ggsn-stop-msisdn-trace>
</rpc>
```

Description Stop tracing Mobile Station Integrated Services Digital Network.

Contents <msisdn-identifier>—Identifier for MSISDN.

<request-ggsn-stop-node>

Usage

```
<rpc>
  <request-ggsn-stop-node/>
</rpc>
```

Description Stop GGSN node activity.

<request-ggsn-stop-trace-activity>

Usage

```
<rpc>
  <request-ggsn-stop-trace-activity/>
</rpc>
```

Description Stop all tracing.

<request-ggsn-terminate-context>

Usage

```
<rpc>
  <request-ggsn-terminate-context>
    <imsi>imsi</imsi>     <!-- mandatory -->
    <nsapi>nsapi</nsapi>
  </request-ggsn-terminate-context>
</rpc>
```

Description Terminate specified kind of PDP context.

Contents <imsi>—Identifier for International Mobile Subscriber Identity.

<nsapi>—Network layer service access point identifier.

<request-ggsn-terminate-contexts-apn>

Usage

```
<rpc>
  <request-ggsn-terminate-contexts-apn>
    <apn-name>apn-name</apn-name>     <!-- mandatory -->
    <user-category>user-category-choice</user-category>
  </request-ggsn-terminate-contexts-apn>
</rpc>
```

Description Terminate all PDP contexts in access point name.

Contents <apn-name>—Name of access point name.

<user-category>—Name of user category ('default' or 1..63).

- default—No documentation is available yet.
- user-value—No documentation is available yet.

<request-ggsn-terminate-msisdn-context>

Usage

```
<rpc>
  <request-ggsn-terminate-msisdn-context>
    <msisdn>msisdn</msisdn>     <!-- mandatory -->
  </request-ggsn-terminate-msisdn-context>
</rpc>
```

Description Terminate context for Mobile Station Integrated Services Digital Network.

Contents <msisdn>—Identifier for MSISDN.

<request-halt>

Usage

```
<rpc>
  <request-halt>
    <at>at</at>
    <in>in</in>
    <message>message</message>
    <media>media-choice</media>
    <partition>partition-choice</partition>
    <both-routing-engines/>
    <other-routing-engine/>
  </request-halt>
</rpc>
```

Description Halt the system.

Contents <at>—Time at which to perform the operation.

<both-routing-engines>—Halt both Routing Engines.

<in>—Number of minutes to delay before operation.

<media>—Boot media for next boot.

- compact-flash—Standard boot off flash device.
- disk—Boot off hard disk.
- external—Boot from external mass storage device.
- internal—Boot from internal NAND flash.
- removable-compact-flash—Boot off removable compact flash device.
- usb—Boot off USB device.

<message>—Message to display to all users.

<other-routing-engine>—Halt other Routing Engine.

<partition>—Partition on boot media to boot from.

- 1—Boot from first partition.
- 2—Boot from second partition.
- alternate—Boot from alternate partition.

<request-license-delete>

Usage

```
<rpc>
  <request-license-delete>
    <license-identifier>license-identifier</license-identifier>     <!-- mandatory -->
  </request-license-delete>
</rpc>
```

Description Delete license keys.

Contents <license-identifier>—Identifier of installed license key.

<request-package-add>

Usage

```
<rpc>
  <request-package-add>
    <force/>
    <reboot/>
    <delay-restart/>
    <no-copy/>
    <no-validate/>
    <validate/>
    <best-effort-load/>
    <unlink/>
    <package-name>package-name</package-name>     <!-- mandatory -->
    <re0/>
    <re1/>
    <scc/>
    <lcc>lcc</lcc>
    <member>member</member>
    <dont-forward/>
  </request-package-add>
</rpc>
```

Description Add extension or upgrade package.

Contents <best-effort-load>—Load succeeds if at least one statement is valid.

<delay-restart>—Don't restart processes.

<dont-forward>—No documentation is available yet.

<force>—Force addition of package (ignore warnings).

<lcc>—Install package on an LCC.

<member>—Install package on VC Member.

<no-copy>—Don't save copies of package files.

<no-validate>—Don't check compatibility with current configuration.

<package-name>—URL or pathname of package.

<re0>—Install package on RE0.

<re1>—Install package on RE1.

<reboot>—Reboot system after adding package.

<scc>—Install package on SCC.

<unlink>—Remove the package after successful installation.

<validate>—Check compatibility with current configuration.

<request-package-delete>

Usage

```
<rpc>
  <request-package-delete>
    <force/>
    <package-name>package-name</package-name>     <!-- mandatory -->
  </request-package-delete>
</rpc>
```

Description Remove extension or upgrade package.

Contents <force>—Force removal of package (ignore warnings).

<package-name>—Name of package.

<request-package-delete-backup>

Usage

```
<rpc>
  <request-package-delete-backup/>
</rpc>
```

Description Delete old system software packages.

<request-package-in-service-upgrade>

Usage

```
<rpc>
  <request-package-in-service-upgrade>
    <reboot/>
    <package-name>package-name</package-name>     <!-- mandatory -->
    <no-old-master-upgrade/>
    <no-copy/>
    <no-validate/>
    <unlink/>
  </request-package-in-service-upgrade>
</rpc>
```

Description In-service software upgrade.

Contents <no-copy>—Don't save copies of package files.

<no-old-master-upgrade>—Don't upgrade the old master after switchover.

<no-validate>—Don't check compatibility with current configuration.

<package-name>—URL or pathname of package.

<reboot>—Reboot system after adding package.

<unlink>—Remove the package after successful installation.

<request-package-rollback>

Usage

```
<rpc>
  <request-package-rollback/>
</rpc>
```

Description Attempt to roll back to previous set of packages.

<request-package-validate>

Usage

```
<rpc>
  <request-package-validate>
    <package-name>package-name</package-name>     <!-- mandatory -->
    <scc/>
    <lcc>lcc</lcc>
    <member>member</member>
    <dont-forward/>
  </request-package-validate>
</rpc>
```

Description Verify package compatibility with current configuration.

Contents <dont-forward>—No documentation is available yet.

<lcc>—Validate package on an LCC.

<member>—Install package on VC Member.

<package-name>—URL or path of package.

<scc>—Validate package on SCC.

<request-power-off>

Usage

```
<rpc>
  <request-power-off>
    <at>at</at>
    <in>in</in>
    <message>message</message>
    <media>media-choice</media>
    <partition>partition-choice</partition>
    <both-routing-engines/>
    <other-routing-engine/>
  </request-power-off>
</rpc>
```

Description Power off the system.

Contents <at>—Time at which to perform the operation.

<both-routing-engines>—Power off both Routing Engines.

<in>—Number of minutes to delay before operation.

<media>—Boot media for next boot.

- compact-flash—Standard boot off flash device.
- disk—Boot off hard disk.
- external—Boot from external mass storage device.
- internal—Boot from internal NAND flash.
- removable-compact-flash—Boot off removable compact flash device.
- usb—Boot off USB device.

<message>—Message to display to all users.

<other-routing-engine>—Power off other Routing Engine.

<partition>—Partition on boot media to boot from.

- 1—Boot from first partition.
- 2—Boot from second partition.
- alternate—Boot from alternate partition.

<request-reboot>

Usage

```
<rpc>
  <request-reboot>
    <at>at</at>
    <in>in</in>
    <message>message</message>
    <media>media-choice</media>
    <partition>partition-choice</partition>
    <other-routing-engine/>
  </request-reboot>
</rpc>
```

Description Reboot the system.

Contents <at>—Time at which to perform the operation.

<in>—Number of minutes to delay before operation.

<media>—Boot media for next boot.

- compact-flash—Standard boot off flash device.
- disk—Boot off hard disk.
- external—Boot from external mass storage device.
- internal—Boot from internal NAND flash.
- removable-compact-flash—Boot off removable compact flash device.
- usb—Boot off USB device.

<message>—Message to display to all users.

<other-routing-engine>—Reboot the other Routing Engine.

<partition>—Partition on boot media to boot from.

- 1—Boot from first partition.
- 2—Boot from second partition.
- alternate—Boot from alternate partition.

<request-redundancy-feb>

Usage

```
<rpc>
  <request-redundancy-feb>
    <slot>slot</slot>     <!-- mandatory -->
    <switch-to-backup/>
    <revert-from-backup/>
  </request-redundancy-feb>
</rpc>
```

Description Change Forwarding Engine Board redundancy status.

Contents <revert-from-backup>—Revert mastership back to configured default.

<slot>—FEB slot number.

<switch-to-backup>—Switch mastership to other FEB.

<request-save-rescue-configuration>

Usage

```
<rpc>
  <request-save-rescue-configuration/>
</rpc>
```

Description Save committed configuration as rescue configuration.

<request-scripts-package-add>

Usage

```
<rpc>
  <request-scripts-package-add>
    <no-copy/>
    <unlink/>
    <package-name>package-name</package-name>     <!-- mandatory -->
    <scc/>
    <lcc>lcc</lcc>
    <member>member</member>
    <dont-forward/>
  </request-scripts-package-add>
</rpc>
```

Description Add or upgrade jais package.

Contents <dont-forward>—No documentation is available yet.

<lcc>—Install package on an LCC.

<member>—Install package on VC Member.

<no-copy>—Don't save copy of jais package file.

<package-name>—URL or pathname of package.

<scc>—Install package on SCC.

<unlink>—Remove the package after successful installation.

<request-scripts-package-delete>

Usage

```
<rpc>
  <request-scripts-package-delete/>
</rpc>
```

Description Remove jais package.

<request-scripts-package-rollback>

Usage

```
<rpc>
  <request-scripts-package-rollback/>
</rpc>
```

Description Attempt to roll back to last jais package.

<request-services-flow-collector-destination>

Usage

```
<rpc>
  <request-services-flow-collector-destination>
    <primary/>
    <secondary/>
    <interface>interface</interface>     <!-- mandatory -->
    <clear-files/>
    <clear-logs/>
    <gracefully/>
    <immediately/>
  </request-services-flow-collector-destination>
</rpc>
```

Description Change to Destination server.

Contents <clear-files>—Remove existing files.

<clear-logs>—Remove existing logs.

<gracefully>—Retain existing FTP connections.

<immediately>—Terminate existing FTP connections.

<interface>—Physical interface.

<primary>—Primary server.

<secondary>—Secondary server.

<request-services-flow-collector-test-file-transfer>

Usage

```
<rpc>
  <request-services-flow-collector-test-file-transfer>
    <filename>filename</filename>     <!-- mandatory -->
    <channel-zero/>
    <channel-one/>
    <primary/>
    <secondary/>
    <interface>interface-choice</interface>     <!-- mandatory -->
  </request-services-flow-collector-test-file-transfer>
</rpc>
```

Description Transfer a test file to the current primary server.

Contents <channel-one>—Channel 1.

<channel-zero>—Channel 0.

<filename>—Specify the filename to use.

<interface>—Interface name.

- all—All configured Collector PICs.
- interface—Physical interface.

<primary>—Primary server.

<secondary>—Secondary server.

<request-snapshot>

Usage

```
<rpc>
  <request-snapshot>
    <partition/>
    <factory/>
    <as-primary/>
    <swap-size>swap-size</swap-size>
    <config-size>config-size</config-size>
    <root-size>root-size</root-size>
    <data-size>data-size</data-size>
    <media>media-choice</media>
  </request-snapshot>
</rpc>
```

Description Archive data and executable areas.

Contents <as-primary>—Setup snapshot to be used in the primary boot device.

<config-size>—Size of the config partition.

<data-size>—Size of the data partition.

<factory>—Include only files shipped from factory in snapshot.

<media>—Media to snapshot to.

- compact-flash—Write snapshot to compact flash.
- removable-compact-flash—Write snapshot to removable compact flash.
- usb—Write snapshot to device connected to USB port.

<partition>—Partition the media.

<root-size>—Size of the root partition.

<swap-size>—Size of the swap partition.

<request-snmp-spoof-trap>

Usage

```
<rpc>
  <request-snmp-spoof-trap>
    <trap>trap</trap>     <!-- mandatory -->
    <variable-bindings>variable-bindings</variable-bindings>
  </request-snmp-spoof-trap>
</rpc>
```

Description Generate artificial SNMP notification.

Contents <trap>—The name of the trap to spoof.

<variable-bindings>—The list of variables & values to include in the trap.

<request-system-storage-cleanup>

Usage

```
<rpc>
  <request-system-storage-cleanup>
    <dry-run/>
  </request-system-storage-cleanup>
</rpc>
```

Description Clean up temporary files and rotate logs.

Contents <dry-run>—Only list the cleanup candidates, do not remove them.

<set-logical-router>

Usage

```
<rpc>
  <set-logical-router>
    <logical-system>logical-system</logical-system>     <!-- mandatory -->
  </set-logical-router>
</rpc>
```

Description Set default logical system.

Contents <logical-system>—Name of logical system.

<traceroute>

Usage

```
<rpc>
  <traceroute>
    <gateway>gateway</gateway>
    <ttl>ttl</ttl>
    <wait>seconds</wait>
    <no-resolve/>
    <source>source</source>
    <tos>tos</tos>
    <as-number-lookup/>
    <bypass-routing/>
    <inet/>
    <inet6/>
    <interface>interface</interface>
    <routing-instance>routing-instance</routing-instance>
    <host>host</host>     <!-- mandatory -->
    <logical-system>logical-system</logical-system>
  </traceroute>
</rpc>
```

Description Trace route to remote host.

Contents

<as-number-lookup>—Look up AS numbers for each hop.

<bypass-routing>—Bypass routing table, use specified interface.

<gateway>—Address of router gateway to route through.

<host>—Hostname or address of remote host.

<inet>—Force traceroute to IPv4 destination.

<inet6>—Force traceroute to IPv6 destination.

<interface>—Name of interface to use for outgoing traffic.

<logical-system>—Name of logical system.

<no-resolve>—Don't attempt to print addresses symbolically.

<routing-instance>—Name of routing instance for traceroute attempt.

<source>—Source address to use in outgoing traceroute packets.

<tos>—IP type-of-service field (IPv4).

<ttl>—IP maximum time-to-live value (or IPv6 maximum hop-limit value).

<wait>—Number of seconds to wait for response.

<walk-snmp-object>

Usage

```
<rpc>
  <walk-snmp-object>
    <snmp-object-name>snmp-object-name</snmp-object-name>     <!-- mandatory -->
  </walk-snmp-object>
</rpc>
```

Description Walk SNMP object values.

Contents <snmp-object-name>—Requested SNMP object names.