

## 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 lxxi.

### <abort-in-service-upgrade>

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<b>Usage</b>	<code>&lt;rpc&gt;</code> <b><code>&lt;abort-in-service-upgrade/&gt;</code></b> <code>&lt;/rpc&gt;</code>
<b>Description</b>	Abort in-service software upgrade.

### <clear-aaa-subscriber-table>

---

<b>Usage</b>	<code>&lt;rpc&gt;</code> <b><code>&lt;clear-aaa-subscriber-table&gt;</code></b> <code>&lt;username&gt;username&lt;/username&gt;</code> <code>&lt;!-- mandatory --&gt;</code> <b><code>&lt;/clear-aaa-subscriber-table&gt;</code></b> <code>&lt;/rpc&gt;</code>
<b>Description</b>	Logout the subscriber and clear the session entry.
<b>Contents</b>	<code>&lt;username&gt;</code> —Subscriber session identifier.

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

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<b>Usage</b>	<code>&lt;rpc&gt;</code> <b><code>&lt;clear-aaa-subscriber-table-specific-statistics&gt;</code></b> <code>&lt;username&gt;username&lt;/username&gt;</code> <code>&lt;!-- mandatory --&gt;</code> <b><code>&lt;/clear-aaa-subscriber-table-specific-statistics&gt;</code></b> <code>&lt;/rpc&gt;</code>
<b>Description</b>	Clear subscriber statistics.
<b>Contents</b>	<code>&lt;username&gt;</code> —Subscriber session identifier.



**<clear-ancp-neighbor-connection>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;clear-ancp-neighbor-connection&gt;     &lt;ip-address&gt;<i>ip-address</i>&lt;/ip-address&gt;     &lt;mac-address&gt;<i>mac-address</i>&lt;/mac-address&gt;   &lt;/clear-ancp-neighbor-connection&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Clear neighbor connection.
<b>Contents</b>	<p>&lt;ip-address&gt;—IP address of the neighbor.</p> <p>&lt;mac-address&gt;—MAC address of the neighbor.</p>

**<clear-appid-application-system-cache>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;clear-appid-application-system-cache/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Clear application system cache.

**<clear-appid-counter>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;clear-appid-counter/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Clear the application identification counters.

**<clear-arp-table>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;clear-arp-table&gt;     &lt;hostname&gt;<i>hostname</i>&lt;/hostname&gt;     &lt;vpn&gt;<i>vpn</i>&lt;/vpn&gt;     &lt;logical-system&gt;<i>logical-system</i>&lt;/logical-system&gt;   &lt;/clear-arp-table&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Clear address resolution information.
<b>Contents</b>	<p>&lt;hostname&gt;—Name of host.</p> <p>&lt;logical-system&gt;—Name of logical system.</p> <p>&lt;vpn&gt;—Name of VPN routing table.</p>



**<clear-authentication-pending-table>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-authentication-pending-table&gt;     &lt;clear-authentication-pending-table-specific&gt;<i>clear-auth-pending-table-specific</i>     &lt;/clear-authentication-pending-table-specific&gt;   &lt;/clear-authentication-pending-table&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear pending authentication requests.
<b>Contents</b>	<clear-authentication-pending-table-specific>—Clear information for a specific request.

**<clear-authentication-statistics>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-authentication-statistics/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear general authentication statistics.

**<clear-binding-all>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-binding-all/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear all bindings.

**<clear-binding-ip>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-binding-ip&gt;     &lt;ip-address&gt;<i>ip-address</i>&lt;/ip-address&gt;    &lt;!-- mandatory --&gt;   &lt;/clear-binding-ip&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear binding entry based on IP address.
<b>Contents</b>	<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>  
           <bridge-domain>bridge-domain</bridge-domain>  
           <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.

              <bridge-domain>—Name of bridge domain.

              <logical-system>—Name of logical system.

              <routing-instance>—Name of routing instance.



## <clear-dhcp-relay-statistics-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;clear-dhcp-relay-statistics-information&gt;     &lt;routing-instance&gt;routing-instance&lt;/routing-instance&gt;     &lt;bridge-domain&gt;bridge-domain&lt;/bridge-domain&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/clear-dhcp-relay-statistics-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Clear DHCP statistics.
<b>Contents</b>	<p>&lt;bridge-domain&gt;—Name of bridge domain.</p> <p>&lt;logical-system&gt;—Name of logical system.</p> <p>&lt;routing-instance&gt;—Name of routing instance.</p>

## <clear-dhcp-server-binding-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;clear-dhcp-server-binding-information&gt;     &lt;address&gt;address&lt;/address&gt;     &lt;all/&gt;     &lt;routing-instance&gt;routing-instance&lt;/routing-instance&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/clear-dhcp-server-binding-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Clear DHCP client binding information.
<b>Contents</b>	<p>&lt;address&gt;—IP address or MAC address of DHCP client binding.</p> <p>&lt;all&gt;—Clear all bindings.</p> <p>&lt;logical-system&gt;—Name of logical system.</p> <p>&lt;routing-instance&gt;—Name of routing instance.</p>

## <clear-dhcp-statistics-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;clear-dhcp-statistics-information/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	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-idp-application-system-cache>**

---

**Usage**   <rpc>  
           **<clear-idp-application-system-cache/>**  
           </rpc>

**Description**   Clear IDP application system cache.

**<clear-idp-attack-table>**

---

**Usage**   <rpc>  
           **<clear-idp-attack-table/>**  
           </rpc>

**Description**   Clear IDP attack table.



## <clear-idp-counters-by-counter-class>

---

**Usage**   <rpc>  
           <clear-idp-counters-by-counter-class>  
             <counter-class>*counter-class*</counter-class>   <!-- mandatory -->  
           </clear-idp-counters-by-counter-class>  
         </rpc>

**Description**   Clear IDP counters.

**Contents**   <counter-class>—No documentation is available yet.

## <clear-idp-ssl-session-cache-information>

---

**Usage**   <rpc>  
           <clear-idp-ssl-session-cache-information/>  
         </rpc>

**Description**   Session ID cache.

## <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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-ipv6-nd-information&gt;     &lt;host&gt;<i>host</i>&lt;/host&gt;   &lt;/clear-ipv6-nd-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear IPv6 neighbor cache information.
<b>Contents</b>	<host>—Name of neighbor.

**<clear-lacp-interface-statistics>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-lacp-interface-statistics&gt;     &lt;interface-name&gt;<i>interface-name</i>&lt;/interface-name&gt;   &lt;/clear-lacp-interface-statistics&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear LACP interface statistics.
<b>Contents</b>	<interface-name>—Name of interface.

**<clear-node-secret-file>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-node-secret-file/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Delete SecurID authentication node secret file.

**<clear-passive-monitoring>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-passive-monitoring/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	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-border-signaling-gateway-statistics>**

---

**Usage**   <rpc>  
           <clear-service-border-signaling-gateway-statistics/>  
           </rpc>

**Description**   Clear BSG statistics counters.

**<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).
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- `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.
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- 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.



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  - `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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-services-dynamic-flow-capture-sequence-number&gt;     &lt;capture-group&gt;capture-group&lt;/capture-group&gt;    &lt;!-- mandatory --&gt;     &lt;source-identifier&gt;source-identifier&lt;/source-identifier&gt;    &lt;!-- mandatory --&gt;   &lt;/clear-services-dynamic-flow-capture-sequence-number&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear dynamic flow capture sequence-number.
<b>Contents</b>	<p>&lt;capture-group&gt;—Capture group name.</p> <p>&lt;source-identifier&gt;—Control source identifier.</p>

**<clear-services-flow-collector-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-services-flow-collector-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear services flow collector information.

**<clear-services-flow-collector-statistics>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-services-flow-collector-statistics&gt;     &lt;interface&gt;interface-choice&lt;/interface&gt;    &lt;!-- mandatory --&gt;   &lt;/clear-services-flow-collector-statistics&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear statistics.
<b>Contents</b>	<p>&lt;interface&gt;—Interface name.</p> <ul style="list-style-type: none"> <li>■ all—All configured Collector PICs.</li> <li>■ interface—Physical interface.</li> </ul>

**<clear-system-commit>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-system-commit/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	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**   Clear 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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;clear-vpls-mac-table&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;vlan-id&gt;vlan-id-choice&lt;/vlan-id&gt;     &lt;address&gt;address&lt;/address&gt;   &lt;/clear-vpls-mac-table&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clear all learned media access control addresses.
<b>Contents</b>	<p>&lt;address&gt;—MAC address.</p> <p>&lt;instance&gt;—Display information for a specified instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;vlan-id&gt;—Clear MAC address learned on a specified VLAN.</p> <ul style="list-style-type: none"> <li>■ all-vlan—Clear MAC addresses on all VLAN(s).</li> <li>■ vlan-id—Clear MAC address learned on a specified VLAN.</li> </ul>

**<file-compare>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;file-compare&gt;     &lt;context/&gt;     &lt;unified/&gt;     &lt;ignore-white-space/&gt;     &lt;from-file&gt;from-file&lt;/from-file&gt;     &lt;to-file&gt;to-file&lt;/to-file&gt;   &lt;/file-compare&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Compare files.
<b>Contents</b>	<p>&lt;context&gt;—Context style output format.</p> <p>&lt;from-file&gt;—File to compare.</p> <p>&lt;ignore-white-space&gt;—Ignore changes in amount of white space.</p> <p>&lt;to-file&gt;—File to compare against.</p> <p>&lt;unified&gt;—Unified style output format.</p>



**<file-copy>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;file-copy&gt;     &lt;source&gt;source&lt;/source&gt;    &lt;!-- mandatory --&gt;     &lt;destination&gt;destination&lt;/destination&gt;    &lt;!-- mandatory --&gt;   &lt;/file-copy&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Copy files (local or remote).
<b>Contents</b>	<p>&lt;destination&gt;—URL of destination file.</p> <p>&lt;source&gt;—URL of source file.</p>

**<file-delete>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;file-delete&gt;     &lt;purge/&gt;     &lt;path&gt;path&lt;/path&gt;    &lt;!-- mandatory --&gt;   &lt;/file-delete&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Delete files from the system.
<b>Contents</b>	<p>&lt;path&gt;—Path to delete.</p> <p>&lt;purge&gt;—Overwrite regular files before deleting them.</p>

**<file-get>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;file-get&gt;     &lt;filename&gt;filename&lt;/filename&gt;    &lt;!-- mandatory --&gt;     &lt;encoding&gt;encoding&lt;/encoding&gt;    &lt;!-- mandatory --&gt;   &lt;/file-get&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Get file from device with contents inlined.
<b>Contents</b>	<p>&lt;encoding&gt;—Encoding type, ascii or base64.</p> <p>&lt;filename&gt;—Name of source file on device.</p>



**<file-list>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;file-list&gt;     &lt;detail/&gt;     &lt;recursive/&gt;     &lt;path&gt;path&lt;/path&gt;   &lt;/file-list&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	List file information.
<b>Contents</b>	<p>&lt;detail&gt;—Display detailed output (like 'ls -l').</p> <p>&lt;path&gt;—Path to list.</p> <p>&lt;recursive&gt;—Descend recursively through directory hierarchy.</p>

**<file-put>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;file-put&gt;     &lt;filename&gt;filename&lt;/filename&gt;    &lt;!-- mandatory --&gt;     &lt;permission&gt;permission&lt;/permission&gt;     &lt;encoding&gt;encoding&lt;/encoding&gt;    &lt;!-- mandatory --&gt;     &lt;delete-if-exist/&gt;     &lt;file-contents&gt;file-contents&lt;/file-contents&gt;    &lt;!-- mandatory --&gt;   &lt;/file-put&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Put file onto device with contents inlined.
<b>Contents</b>	<p>&lt;delete-if-exist&gt;—Delete the destination file on device if it already exists.</p> <p>&lt;encoding&gt;—Encoding type, ascii or base64.</p> <p>&lt;file-contents&gt;—File content.</p> <p>&lt;filename&gt;—Name of destination file on device.</p> <p>&lt;permission&gt;—Name of destination file on device.</p>



**<file-rename>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;file-rename&gt;     &lt;source&gt;source&lt;/source&gt;    &lt;!-- mandatory --&gt;     &lt;destination&gt;destination&lt;/destination&gt;    &lt;!-- mandatory --&gt;   &lt;/file-rename&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Rename files.
<b>Contents</b>	<p>&lt;destination&gt;—Destination URL.</p> <p>&lt;source&gt;—Source URL.</p>

**<file-show>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;file-show&gt;     &lt;filename&gt;filename&lt;/filename&gt;    &lt;!-- mandatory --&gt;     &lt;encoding&gt;encoding-choice&lt;/encoding&gt;   &lt;/file-show&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show file contents.
<b>Contents</b>	<p>&lt;encoding&gt;—Encode file contents.</p> <ul style="list-style-type: none"> <li>■ base64—Encode file with base64 encoding.</li> </ul> <p>&lt;filename&gt;—Filename to show.</p>

**<get-aaa-module-statistics>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-aaa-module-statistics&gt;     &lt;authentication/&gt;     &lt;accounting/&gt;     &lt;dynamic-requests/&gt;   &lt;/get-aaa-module-statistics&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Authentication, authorization and accounting (AAA) module statistics.
<b>Contents</b>	<p>&lt;accounting&gt;—Accounting statistics.</p> <p>&lt;authentication&gt;—Authentication statistics.</p> <p>&lt;dynamic-requests&gt;—Dynamic requests statistics.</p>



## <get-aaa-subscriber-statistics>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-aaa-subscriber-statistics&gt;     &lt;username&gt;username&lt;/username&gt;    &lt;!-- mandatory --&gt;   &lt;/get-aaa-subscriber-statistics&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Statistics on subscriber events.
<b>Contents</b>	<username>—Show statistics for this subscriber's session entry.

## <get-aaa-subscriber-table>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-aaa-subscriber-table&gt;     &lt;username&gt;username&lt;/username&gt;     &lt;routing-instance&gt;routing-instance&lt;/routing-instance&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-aaa-subscriber-table&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	List subscriber specific command options.
<b>Contents</b>	<p>&lt;logical-system&gt;—Name of logical system.</p> <p>&lt;routing-instance&gt;—Name of routing instance.</p> <p>&lt;username&gt;—Show details for this subscriber's session entry.</p>

## <get-accounting-profile-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-accounting-profile-information&gt;     &lt;profile&gt;profile&lt;/profile&gt;   &lt;/get-accounting-profile-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show accounting profile information.
<b>Contents</b>	<profile>—Profile name.



**<get-accounting-record-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-accounting-record-information&gt;     &lt;profile&gt;profile&lt;/profile&gt;    &lt;!-- mandatory --&gt;     &lt;since&gt;since&lt;/since&gt;     &lt;utc-timestamp/&gt;   &lt;/get-accounting-record-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show accounting records.
<b>Contents</b>	<p>&lt;profile&gt;—Name of profile.</p> <p>&lt;since&gt;—Timestamp on earliest records to show (YYYY-MM-DD.HH:MM:SS).</p> <p>&lt;utc-timestamp&gt;—Display timestamp in UTC format.</p>

**<get-active-servers>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-active-servers/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show configured servers.

**<get-address-assignment-pool-table>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-address-assignment-pool-table&gt;      &lt;get-address-assignment-pool-table-specific&gt;get-address-assignment-pool-table-specific   &lt;/get-address-assignment-pool-table-specific&gt;    &lt;!-- mandatory --&gt;     &lt;routing-instance&gt;routing-instance&lt;/routing-instance&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-address-assignment-pool-table&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show pool information.
<b>Contents</b>	<p>&lt;get-address-assignment-pool-table-specific&gt;—Show information for a specific pool.</p> <p>&lt;logical-system&gt;—Name of logical system.</p> <p>&lt;routing-instance&gt;—Name of routing instance.</p>



## <get-alarm-information>

---

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

**Description**   Show alarm status.

## <get-ancp-cos-information>

---

**Usage**   <rpc>  
          <get-ancp-cos-information>  
          <identifier>*identifier*</identifier>  
          </get-ancp-cos-information>  
          </rpc>

**Description**   Show ANCP Cos information.

**Contents**   <identifier>—Access loop identifier.

## <get-ancp-cos-last-update-information>

---

**Usage**   <rpc>  
          <get-ancp-cos-last-update-information/>  
          </rpc>

**Description**   Show ANCP Last Update Cos information.

## <get-ancp-cos-pending-information>

---

**Usage**   <rpc>  
          <get-ancp-cos-pending-information/>  
          </rpc>

**Description**   Show ANCP Pending Update Cos information.



**<get-ancp-neighbor-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ancp-neighbor-information&gt;     &lt;terse/&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;ip-address&gt;<i>ip-address</i>&lt;/ip-address&gt;     &lt;mac-address&gt;<i>mac-address</i>&lt;/mac-address&gt;   &lt;/get-ancp-neighbor-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Neighbor information.
<b>Contents</b>	<p>&lt;brief&gt;—Brief output.</p> <p>&lt;detail&gt;—Detailed output.</p> <p>&lt;extensive&gt;—Extensive output.</p> <p>&lt;ip-address&gt;—IP address of the neighbor.</p> <p>&lt;mac-address&gt;—MAC address of the neighbor.</p> <p>&lt;terse&gt;—Terse output.</p>

**<get-ancp-subscriber-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ancp-subscriber-information&gt;     &lt;terse/&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;identifier&gt;<i>identifier</i>&lt;/identifier&gt;     &lt;neighbor&gt;<i>neighbor</i>&lt;/neighbor&gt;   &lt;/get-ancp-subscriber-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Subscriber information.
<b>Contents</b>	<p>&lt;brief&gt;—Brief output.</p> <p>&lt;detail&gt;—Detailed output.</p> <p>&lt;extensive&gt;—Extensive output.</p> <p>&lt;identifier&gt;—Access loop identifier.</p> <p>&lt;neighbor&gt;—Subscriber information from a neighbor.</p> <p>&lt;terse&gt;—Terse output.</p>



**<get-appid-application-system-cache>**

---

**Usage**   <rpc>  
           <get-appid-application-system-cache/>  
           </rpc>

**Description**   Show application system cache.

**<get-appid-counter>**

---

**Usage**   <rpc>  
           <get-appid-counter/>  
           </rpc>

**Description**   Show the application identification counters.

**<get-appid-package-version>**

---

**Usage**   <rpc>  
           <get-appid-package-version/>  
           </rpc>

**Description**   Show the current application package version.

**<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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-authentication-pending-table&gt;     &lt;get-authentication-pending-table-detailed/&gt;     &lt;get-authentication-pending-table-specific&gt;get-auth-pending-table-specific   &lt;/get-authentication-pending-table&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show pending authentication requests.
<b>Contents</b>	<p>&lt;get-authentication-pending-table-detailed&gt;—Show the detailed information.</p> <p>&lt;get-authentication-pending-table-specific&gt;—Show detail information for a specific request.</p>

## <get-authentication-statistics>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-authentication-statistics/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show authentication statistics.

## <get-authorization-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-authorization-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show authorization and authentication information.



## <get-bfd-session-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-bfd-session-information&gt;     &lt;summary/&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-bfd-session-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show all BFD sessions.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;summary&gt;—Display summary output.</p>

## <get-bgp-group-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-bgp-group-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;summary/&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;group-name&gt;group-name&lt;/group-name&gt;   &lt;/get-bgp-group-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show the BGP group database.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;group-name&gt;—Show group information for a particular group.</p> <p>&lt;instance&gt;—Show peer information for a particular instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;summary&gt;—Display summary output.</p>



**<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-name>*bridge-domain-name*</bridge-domain-name>  
         <interface>*interface*</interface>  
         <detail/>  
         <brief/>  
         <extensive/>  
     </get-bridge-instance-information>  
 </rpc>
- Description** Show bridge domain information.
- Contents** <bridge-domain-name>—Display information for a specified bridge domain.
- <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>*adaptive-shaper-name*</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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-cos-traffic-control-profile-information&gt;     &lt;traffic-control-profile-name&gt;traffic-control-profile-name     &lt;/traffic-control-profile-name&gt;   &lt;/get-cos-traffic-control-profile-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show traffic control profiles.
<b>Contents</b>	<traffic-control-profile-name>—Name of traffic control profile.

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

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-cos-translation-table-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show translation table information.

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

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-cos-translation-table-map-information&gt;     &lt;translation-table-name&gt;translation-table-name&lt;/translation-table-name&gt;     &lt;type&gt;type-choice&lt;/type&gt;   &lt;/get-cos-translation-table-map-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show mapping of code point to code point.
<b>Contents</b>	<p>&lt;translation-table-name&gt;—Name of translation table.</p> <p>&lt;type&gt;—Type of translation table.</p> <ul style="list-style-type: none"> <li>■ to-dscp-from-dscp—DSCP to DSCP translation table.</li> <li>■ to-dscp-ipv6-from-dscp-ipv6—DSCP IPV6 to DSCP IPV6 translation table.</li> <li>■ to-exp-from-exp—EXP to EXP translation table.</li> <li>■ to-inet-precedence-from-inet-precedence—INET PRECEDENCE to INET PRECEDENCE translation table.</li> </ul>



**<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-crl-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;crl-name&gt;crl-name&lt;/crl-name&gt;   &lt;/get-crl-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IPSec digital certificate revocation lists.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output.</p> <p>&lt;crl-name&gt;—Name of CRL.</p> <p>&lt;detail&gt;—Display detailed output.</p>

**<get-database-replication-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-database-replication-statistics-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show database replication statistics.

**<get-database-replication-summary-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-database-replication-summary-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show database replication summary.

**<get-destination-class-statistics>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-destination-class-statistics&gt;     &lt;class-name&gt;class-name&lt;/class-name&gt;    &lt;!-- mandatory --&gt;     &lt;interface-name&gt;interface-name&lt;/interface-name&gt;   &lt;/get-destination-class-statistics&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show statistics for destination class.
<b>Contents</b>	<p>&lt;class-name&gt;—Name of destination class.</p> <p>&lt;interface-name&gt;—Name of logical interface.</p>



## <get-dhcp-binding-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dhcp-binding-information&gt;     &lt;detail/&gt;     &lt;address&gt;address&lt;/address&gt;   &lt;/get-dhcp-binding-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DHCP client binding information.
<b>Contents</b>	<p>&lt;address&gt;—Address of DHCP client binding.</p> <p>&lt;detail&gt;—Display detailed information.</p>

## <get-dhcp-conflict-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dhcp-conflict-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DHCP address conflict.

## <get-dhcp-global-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dhcp-global-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DHCP global scope information.

## <get-dhcp-pool-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dhcp-pool-information&gt;     &lt;detail/&gt;     &lt;subnet-address&gt;subnet-address&lt;/subnet-address&gt;   &lt;/get-dhcp-pool-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DHCP address pool information.
<b>Contents</b>	<p>&lt;detail&gt;—Display detailed information.</p> <p>&lt;subnet-address&gt;—Logical subnet of address pool.</p>



**<get-dhcp-relay-binding-information>**

---

**Usage** <rpc>  
     **<get-dhcp-relay-binding-information>**  
         <detail/>  
         <address>*address*</address>  
         <routing-instance>*routing-instance*</routing-instance>  
         <bridge-domain>*bridge-domain*</bridge-domain>  
         <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.  
             <bridge-domain>—Name of bridge domain.  
             <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>  
         <bridge-domain>*bridge-domain*</bridge-domain>  
         <logical-system>*logical-system*</logical-system>  
     **</get-dhcp-relay-statistics-information>**  
 </rpc>

**Description** Show DHCP statistics.

**Contents** <bridge-domain>—Name of bridge domain.  
             <logical-system>—Name of logical system.  
             <routing-instance>—Name of routing instance.



**<get-dhcp-server-binding-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dhcp-server-binding-information&gt;     &lt;detail/&gt;     &lt;address&gt;address&lt;/address&gt;     &lt;routing-instance&gt;routing-instance&lt;/routing-instance&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-dhcp-server-binding-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DHCP server client binding information.
<b>Contents</b>	<p>&lt;address&gt;—IP address or MAC address of DHCP client binding.</p> <p>&lt;detail&gt;—Display detailed information.</p> <p>&lt;logical-system&gt;—Name of logical system.</p> <p>&lt;routing-instance&gt;—Name of routing instance.</p>

**<get-dhcp-server-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dhcp-server-statistics-information&gt;     &lt;routing-instance&gt;routing-instance&lt;/routing-instance&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-dhcp-server-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DHCP server statistics.
<b>Contents</b>	<p>&lt;logical-system&gt;—Name of logical system.</p> <p>&lt;routing-instance&gt;—Name of routing instance.</p>

**<get-dhcp-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dhcp-statistics-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DHCP statistics.



## <get-directory-usage-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-directory-usage-information&gt;     &lt;path&gt;path&lt;/path&gt;     &lt;depth&gt;depth&lt;/depth&gt;   &lt;/get-directory-usage-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show local directory information.
<b>Contents</b>	<p>&lt;depth&gt;—Depth of directories to traverse.</p> <p>&lt;path&gt;—Path of root directory to traverse.</p>

## <get-dot1x-authentication-failed-users>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-dot1x-authentication-failed-users/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	List users who have failed 802.1X authentication.

## <get-dot1x-interface-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-dot1x-interface-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;interface-name&gt;interface-name&lt;/interface-name&gt;   &lt;/get-dot1x-interface-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show 802.1X interface information.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;interface-name&gt;—Name of interface.</p>



**<get-dot1x-interface-mac-addresses>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dot1x-interface-mac-addresses&gt;     &lt;interface-name&gt;interface-name&lt;/interface-name&gt;   &lt;/get-dot1x-interface-mac-addresses&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show 802.1X static MAC addresses on this interface.
<b>Contents</b>	<interface-name>—Show static MAC addresses of interface.

**<get-dot1x-static-mac-addresses>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dot1x-static-mac-addresses/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show 802.1X static MAC addresses.

**<get-dvmrp-interfaces-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dvmrp-interfaces-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-dvmrp-interfaces-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DVMRP interfaces.
<b>Contents</b>	<logical-system>—Name of logical system, or 'all'.

**<get-dvmrp-neighbors-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-dvmrp-neighbors-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-dvmrp-neighbors-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DVMRP neighbors.
<b>Contents</b>	<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-es-is-interface-information>

---

**Usage** <rpc>  
     <get-es-is-interface-information>  
         <logical-system>*logical-system*</logical-system>  
         <brief/>  
         <detail/>  
         <extensive/>  
         <instance>*instance*</instance>  
         <interface-name>*interface-name*</interface-name>  
     </get-es-is-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-es-is-statistics-information>

---

**Usage** <rpc>  
     <get-es-is-statistics-information>  
         <logical-system>*logical-system*</logical-system>  
         <instance>*instance*</instance>  
     </get-es-is-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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-fabric-queue-information&gt;     &lt;destination&gt;destination&lt;/destination&gt;     &lt;source&gt;source&lt;/source&gt;     &lt;summary/&gt;   &lt;/get-fabric-queue-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show fabric queue statistics.
<b>Contents</b>	<p>&lt;destination&gt;—Destination FPC for which to show details.</p> <p>&lt;source&gt;—Source FPC for which to show details.</p> <p>&lt;summary&gt;—Display summary output.</p>

**<get-feb-brief-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-feb-brief-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show Forwarding Engine Board status.

**<get-feb-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-feb-information&gt;     &lt;feb_slot&gt;feb_slot&lt;/feb_slot&gt;   &lt;/get-feb-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show detailed output.
<b>Contents</b>	<feb_slot>—FEB slot number.

**<get-feb-redundancy-error-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-feb-redundancy-error-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	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>`  
         `<terse/>`  
     **</get-firewall-information>**  
`</rpc>`

**Description** Show firewall information.

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

`<terse>`—Show filter names only.

**<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 instance.

## <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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-imsi-trace&gt;     &lt;imsi-identifier&gt;<i>imsi-identifier</i>&lt;/imsi-identifier&gt;    &lt;!-- mandatory --&gt;   &lt;/get-ggsn-imsi-trace&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show trace information for Identifier for International Mobile Subscriber Identity.
<b>Contents</b>	<imsi-identifier>—Identifier for IMSI.

**<get-ggsn-imsi-user-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-imsi-user-information&gt;     &lt;imsi-identifier&gt;<i>imsi-identifier</i>&lt;/imsi-identifier&gt;    &lt;!-- mandatory --&gt;   &lt;/get-ggsn-imsi-user-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show International Mobile Subscriber Identity statistics.
<b>Contents</b>	<imsi-identifier>—Identifier for IMSI.

**<get-ggsn-interface-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-interface-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show GGSN operational status information.

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

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-l2tp-tunnel-statistics-information&gt;     &lt;lac-address&gt;<i>lac-address</i>&lt;/lac-address&gt;   &lt;/get-ggsn-l2tp-tunnel-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show L2TP tunnel statistics.
<b>Contents</b>	<lac-address>—IP address of LAC.



**<get-ggsn-msisdn-trace>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-msisdn-trace&gt;     &lt;msisdn-identifier&gt;msisdn-identifier&lt;/msisdn-identifier&gt;    &lt;!-- mandatory --&gt;   &lt;/get-ggsn-msisdn-trace&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show trace information for Mobile Station Integrated Services Digital Network.
<b>Contents</b>	<msisdn-identifier>—Identifier for MSISDN.

**<get-ggsn-radius-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-radius-statistics-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show RADIUS statistics.

**<get-ggsn-sgsn-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-sgsn-statistics-information&gt;     &lt;address&gt;address&lt;/address&gt;   &lt;/get-ggsn-sgsn-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show statistics for client Serving GPRS Support Node.
<b>Contents</b>	<address>—IP address and optional prefix length of SGSN.

**<get-ggsn-statistics>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-statistics/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show GGSN statistics.

**<get-ggsn-trace>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ggsn-trace/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show all trace information.



## <get-global-mac-count>

---

**Usage**   <rpc>  
           <get-global-mac-count/>  
           </rpc>

**Description**   Show global MAC address count.

## <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-idp-application-system-cache>**

---

**Usage**   <rpc>  
           **<get-idp-application-system-cache/>**  
           </rpc>

**Description**   Show IDP application system cache.



**<get-idp-attack-table-information>**

---

**Usage**   <rpc>  
           <get-idp-attack-table-information/>  
           </rpc>

**Description**   Show IDP attack table.

**<get-idp-counter-information>**

---

**Usage**   <rpc>  
           <get-idp-counter-information>  
           <counter-class>*counter-class*</counter-class>   <!-- mandatory -->  
           </get-idp-counter-information>  
           </rpc>

**Description**   Show IDP counters.

**Contents**   <counter-class>—Show IDP counters by counter class.

**<get-idp-memory-information>**

---

**Usage**   <rpc>  
           <get-idp-memory-information/>  
           </rpc>

**Description**   Show IDP data plane memory statistics.

**<get-idp-security-package-information>**

---

**Usage**   <rpc>  
           <get-idp-security-package-information/>  
           </rpc>

**Description**   Show the version of currently installed security-package.

**<get-idp-ssl-key-information>**

---

**Usage**   <rpc>  
           <get-idp-ssl-key-information>  
           <key-name>*key-name*</key-name>  
           </get-idp-ssl-key-information>  
           </rpc>

**Description**   Show SSL keys.

**Contents**   <key-name>—Key name.



**<get-idp-ssl-session-cache-information>**

---

**Usage**   <rpc>  
           **<get-idp-ssl-session-cache-information/>**  
           </rpc>

**Description**   Session ID cache.

**<get-idp-status-information>**

---

**Usage**   <rpc>  
           **<get-idp-status-information/>**  
           </rpc>

**Description**   Show IDP status.

**<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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-igmp-snooping-membership-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;group&gt;group&lt;/group&gt;     &lt;interface&gt;interface&lt;/interface&gt;     &lt;vlan-id&gt;vlan-id&lt;/vlan-id&gt;     &lt;instance&gt;instance&lt;/instance&gt;   &lt;/get-igmp-snooping-membership-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IGMP snooping group membership.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;group&gt;—IP address range for group.</p> <p>&lt;instance&gt;—Name of routing-instance.</p> <p>&lt;interface&gt;—Name of interface.</p> <p>&lt;vlan-id&gt;—VLAN ID for a learning domain.</p>

## <get-igmp-snooping-statistics-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-igmp-snooping-statistics-information&gt;     &lt;interface&gt;interface&lt;/interface&gt;     &lt;vlan-id&gt;vlan-id&lt;/vlan-id&gt;     &lt;instance&gt;instance&lt;/instance&gt;   &lt;/get-igmp-snooping-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IGMP snooping statistics.
<b>Contents</b>	<p>&lt;instance&gt;—Name of routing-instance.</p> <p>&lt;interface&gt;—Name of interface.</p> <p>&lt;vlan-id&gt;—VLAN ID for a learning domain.</p>



**<get-igmp-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-igmp-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-igmp-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IGMP statistics.
<b>Contents</b>	<p>&lt;interface&gt;—Name of interface.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

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

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ike-security-associations-information&gt;     &lt;brieff/&gt;     &lt;detail/&gt;     &lt;peer-address&gt;peer-address&lt;/peer-address&gt;   &lt;/get-ike-security-associations-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IKE security association information.
<b>Contents</b>	<p>&lt;brieff&gt;—Show brief output (default).</p> <p>&lt;detail&gt;—Show detailed output.</p> <p>&lt;peer-address&gt;—Name of security association.</p>

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

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ike-services-security-associations-information&gt;     &lt;brieff/&gt;     &lt;detail/&gt;     &lt;peer-address&gt;peer-address&lt;/peer-address&gt;   &lt;/get-ike-services-security-associations-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show services IKE security association information.
<b>Contents</b>	<p>&lt;brieff&gt;—Show brief output (default).</p> <p>&lt;detail&gt;—Show detailed output.</p> <p>&lt;peer-address&gt;—Name of security association.</p>



**<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-isis-authentication-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;   &lt;/get-isis-authentication-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IS-IS authentication information.
<b>Contents</b>	<p>&lt;instance&gt;—Name of IS-IS instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

**<get-isis-database-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-isis-database-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;level&gt;level&lt;/level&gt;     &lt;system-id&gt;system-id&lt;/system-id&gt;   &lt;/get-isis-database-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IS-IS link-state database.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;instance&gt;—Name of IS-IS instance.</p> <p>&lt;level&gt;—Number of IS-IS level.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;system-id&gt;—System ID of IS.</p>



**<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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-isis-overview-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;   &lt;/get-isis-overview-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show overview of IS-IS information.
<b>Contents</b>	<p>&lt;instance&gt;—Name of IS-IS instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

## <get-isis-route-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-isis-route-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;destination&gt;destination&lt;/destination&gt;     &lt;inet/&gt;     &lt;inet6/&gt;     &lt;iso/&gt;     &lt;topology&gt;topology-choice&lt;/topology&gt;   &lt;/get-isis-route-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IS-IS routing table.
<b>Contents</b>	<p>&lt;destination&gt;—IP address and optional prefix length of destination.</p> <p>&lt;inet&gt;—Display IPv4 routes.</p> <p>&lt;inet6&gt;—Display IPv6 routes.</p> <p>&lt;instance&gt;—Name of IS-IS instance.</p> <p>&lt;iso&gt;—Display CLNS routes.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;topology&gt;—Name of topology from which routes were learned.</p> <ul style="list-style-type: none"> <li>■ ipv4-multicast—IPv4 multicast topology.</li> <li>■ ipv6-multicast—IPv6 multicast topology.</li> <li>■ ipv6-unicast—IPv6 unicast topology.</li> <li>■ unicast—Unicast topology.</li> </ul>



**<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>  
           <b><get-lacp-interface-information>  
           <interface-name>*interface-name*</interface-name>  
           <b></get-lacp-interface-information>  
           </rpc>

**Description**   Show LACP interfaces information.

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

**<get-lacp-interface-statistics>**

---

**Usage**   <rpc>  
           <b><get-lacp-interface-statistics>  
           <interface-name>*interface-name*</interface-name>  
           <b></get-lacp-interface-statistics>  
           </rpc>

**Description**   Show LACP interface statistics.

**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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ldp-session-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;destination&gt;destination&lt;/destination&gt;   &lt;/get-ldp-session-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show LDP session status.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;destination&gt;—IP address of session destination.</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;instance&gt;—Name of LDP routing instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

## <get-ldp-statistics-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ldp-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;   &lt;/get-ldp-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show LDP statistics.
<b>Contents</b>	<p>&lt;instance&gt;—Name of LDP routing instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>



**<get-ldp-traffic-statistics-information>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-ldp-traffic-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;   &lt;/get-ldp-traffic-statistics-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show packet statistics for LDP label-switched paths.
<b>Contents</b>	<p>&lt;instance&gt;—Name of LDP routing instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

**<get-lfmd-information>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-lfmd-information&gt;     &lt;detail/&gt;     &lt;brief/&gt;     &lt;interface-name&gt;interface-name&lt;/interface-name&gt;   &lt;/get-lfmd-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show link-fault-management information.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief data (default).</p> <p>&lt;detail&gt;—Display detailed data.</p> <p>&lt;interface-name&gt;—Name of physical interface.</p>

**<get-license-information>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-license-information/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show installed feature licenses.

**<get-license-key-information>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-license-key-information/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	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>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-lm-routing-resource-information&gt;     &lt;resource-name&gt;resource-name&lt;/resource-name&gt;   &lt;/get-lm-routing-resource-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show resource information.
<b>Contents</b>	<resource-name>—Name of resource.

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

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-lm-routing-te-link-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;link-name&gt;link-name&lt;/link-name&gt;   &lt;/get-lm-routing-te-link-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show traffic engineering links information.
<b>Contents</b>	<brief>—Display brief output (default). <detail>—Display detailed output. <link-name>—Name of traffic engineering link.

## <get-lm-statistics-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-lm-statistics-information/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show link management statistics.



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

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-lm-te-link-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;link-name&gt;link-name&lt;/link-name&gt;   &lt;/get-lm-te-link-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show traffic engineering links information.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;link-name&gt;—Name of traffic engineering link.</p>

## <get-mac-database>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-mac-database&gt;     &lt;interface-name&gt;interface-name&lt;/interface-name&gt;    &lt;!-- mandatory --&gt;     &lt;mac-address&gt;mac-address&lt;/mac-address&gt;   &lt;/get-mac-database&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show media access control database information.
<b>Contents</b>	<p>&lt;interface-name&gt;—Name of physical or logical interface.</p> <p>&lt;mac-address&gt;—MAC address.</p>

## <get-mip-binding-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-mip-binding-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-mld-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-mld-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show MLD statistics.
<b>Contents</b>	<p>&lt;interface&gt;—Name of interface.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

**<get-mpls-admin-group-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-mpls-admin-group-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-mpls-admin-group-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show MPLS administrative groups.
<b>Contents</b>	<logical-system>—Name of logical system, or 'all'.

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

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-mpls-call-admission-control-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;lsp-name&gt;lsp-name&lt;/lsp-name&gt;   &lt;/get-mpls-call-admission-control-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show CAC information for MPLS LSPs.
<b>Contents</b>	<p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;lsp-name&gt;—Name of LSP.</p>



## <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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-msdp-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;peer&gt;peer&lt;/peer&gt;   &lt;/get-msdp-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show MSDP statistics.
<b>Contents</b>	<p>&lt;instance&gt;—Name of instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;peer&gt;—IPv4 address and optional prefix length of MSDP peers.</p>

**<get-mspinfo-connections>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-mspinfo-connections&gt;     &lt;inet/&gt;     &lt;inet6/&gt;     &lt;extensive/&gt;     &lt;show-routing-instances/&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-mspinfo-connections&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show connection activity on the extension provider PIC.
<b>Contents</b>	<p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;inet&gt;—Display IPv4 connections.</p> <p>&lt;inet6&gt;—Display IPv6 connections.</p> <p>&lt;interface&gt;—Name of extension provider interface.</p> <p>&lt;show-routing-instances&gt;—Display routing instances.</p>



**<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>  
           <b><get-mspinfo-processes-extensive>  
           <interface>*interface*</interface>  
           </b></get-mspinfo-processes-extensive>  
         </rpc>

**Description**   Display brief output.

**Contents**   <interface>—Name of extension provider interface.

**<get-mspinfo-uptime>**

---

**Usage**   <rpc>  
           <b><get-mspinfo-uptime>  
           <interface>*interface*</interface>  
           </b></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>  
           <b><get-mspinfo-virtual-memory>  
           <interface>*interface*</interface>  
           </b></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>  
           <b><get-multicast-backup-pe-address-information>  
           <logical-system>*logical-system*</logical-system>  
           <pe\_address>*pe\_address*</pe\_address>   <!-- mandatory -->  
           </b></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>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-multicast-backup-pe-groups-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;   &lt;/get-multicast-backup-pe-groups-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show backup PE groups.
<b>Contents</b>	<p>&lt;instance&gt;—Name of instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

## <get-multicast-flow-maps-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-multicast-flow-maps-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;brief/&gt;     &lt;detail/&gt;   &lt;/get-multicast-flow-maps-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show configured flow maps.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

## <get-multicast-interface-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-multicast-interface-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-multicast-interface-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show configured interfaces.
<b>Contents</b>	<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>  
         <regex>*regex*</regex>  
     **</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'.

<regex>—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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-multicast-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;inet/&gt;     &lt;inet6/&gt;   &lt;/get-multicast-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show multicast statistics.
<b>Contents</b>	<p>&lt;inet&gt;—Display statistics for IPv4.</p> <p>&lt;inet6&gt;—Display statistics for IPv6.</p> <p>&lt;instance&gt;—Name of instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

**<get-multicast-usage-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-multicast-usage-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;inet/&gt;     &lt;inet6/&gt;   &lt;/get-multicast-usage-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show multicast usage information.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;inet&gt;—Display IPv4 information.</p> <p>&lt;inet6&gt;—Display IPv6 information.</p> <p>&lt;instance&gt;—Name of instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>



**<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/>  
         <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>—External LSAs.

<instance>—Name of OSPFv3 instance.

<inter-area-prefix>—Inter-area-prefix LSAs.

<inter-area-router>—Inter-area-router LSAs.

<intra-area-prefix>—Intra-area-prefix LSAs.

<link>—Link LSAs.

<link-local>—Link-local LSAs.

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

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



<network>—Network LSAs.

<nssa>—NSSA LSAs.

<realm>—Name of realm.

- ipv4-multicast—IPv4 multicast realm.

- ipv4-unicast—IPv4 unicast realm.

- ipv6-multicast—IPv6 multicast realm.

<router>—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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ospf3-io-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;   &lt;/get-ospf3-io-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show OSPFv3 I/O statistics.
<b>Contents</b>	<logical-system>—Name of logical system, or 'all'.

**<get-ospf3-log-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ospf3-log-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;realm&gt;realm-choice&lt;/realm&gt;   &lt;/get-ospf3-log-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show OSPFv3 SPF log.
<b>Contents</b>	<p>&lt;instance&gt;—Name of OSPFv3 instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;realm&gt;—Name of realm.</p> <ul style="list-style-type: none"> <li>■ ipv4-multicast—IPv4 multicast realm.</li> <li>■ ipv4-unicast—IPv4 unicast realm.</li> <li>■ ipv6-multicast—IPv6 multicast realm.</li> </ul>



**<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ospf3-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;realm&gt;realm-choice&lt;/realm&gt;   &lt;/get-ospf3-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show OSPFv3 statistics.
<b>Contents</b>	<p>&lt;instance&gt;—Name of OSPFv3 instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;realm&gt;—Name of realm.</p> <ul style="list-style-type: none"> <li>■ ipv4-multicast—IPv4 multicast realm.</li> <li>■ ipv4-unicast—IPv4 unicast realm.</li> <li>■ ipv6-multicast—IPv6 multicast realm.</li> </ul>

**<get-package-backup-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-package-backup-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show status of old system software packages.

**<get-packet-distribution-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-packet-distribution-information&gt;     &lt;packet-size-distribution-information&gt;packet-size-distribution-information     &lt;/packet-size-distribution-information&gt;   &lt;/get-packet-distribution-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show packet size distribution.
<b>Contents</b>	<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-mvpn-information>**

---

**Usage** <rpc>  
     **<get-pim-mvpn-information>**  
         <logical-system>*logical-system*</logical-system>  
     **</get-pim-mvpn-information>**  
 </rpc>

**Description** Show PIM MVPN instances.

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



**<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ppp-statistics-information&gt;     &lt;detail/&gt;     &lt;memory/&gt;   &lt;/get-ppp-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show PPP statistics.
<b>Contents</b>	<p>&lt;detail&gt;—Display detailed statistics.</p> <p>&lt;memory&gt;—Display PPP process memory statistics.</p>

**<get-ppp-summary-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ppp-summary-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show PPP summary information.

**<get-pppoe-interface-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-pppoe-interface-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;interface-name&gt;interface-name&lt;/interface-name&gt;   &lt;/get-pppoe-interface-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show interface information.
<b>Contents</b>	<p>&lt;brief&gt;—Show brief output.</p> <p>&lt;detail&gt;—Show detailed output.</p> <p>&lt;extensive&gt;—Show extensive output.</p> <p>&lt;interface-name&gt;—Name of PPPoE logical interface.</p>

**<get-pppoe-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-pppoe-statistics-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	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>  
           <b>get-rescue-information</b>  
           <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>  
           <b>get-rip-general-statistics-information</b>  
           <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>  
           <b>get-rip-neighbor-information</b>  
           <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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-rip-statistics-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;neighbor-name&gt;neighbor-name&lt;/neighbor-name&gt;     &lt;instance&gt;instance-choice&lt;/instance&gt;   &lt;/get-rip-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show RIP statistics.
<b>Contents</b>	<p>&lt;instance&gt;—Name of RIP instance.</p> <ul style="list-style-type: none"> <li>■ all—Show all instances.</li> <li>■ instance-name—Name of RIP instance.</li> </ul> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;neighbor-name&gt;—Name of RIP neighbor.</p>

## <get-rmon-alarm-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-rmon-alarm-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;   &lt;/get-rmon-alarm-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show RMON alarms.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p>

## <get-rmon-event-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-rmon-event-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;   &lt;/get-rmon-event-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show RMON events.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p>



## <get-rmon-history-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-rmon-history-information&gt;     &lt;index&gt;index&lt;/index&gt;     &lt;sample-index&gt;sample-index&lt;/sample-index&gt;   &lt;/get-rmon-history-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show RMON history.
<b>Contents</b>	<p>&lt;index&gt;—No documentation is available yet.</p> <p>&lt;sample-index&gt;—No documentation is available yet.</p>

## <get-rmon-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-rmon-information/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show remote monitoring information.

## <get-rmon-log-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-rmon-log-information/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show rmon monitoring logs.



## <get-rollback-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-rollback-information&gt;     &lt;rollback&gt;rollback&lt;/rollback&gt;    &lt;!-- mandatory --&gt;     &lt;compare&gt;compare&lt;/compare&gt;     &lt;format&gt;format-choice&lt;/format&gt;   &lt;/get-rollback-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show rolled back configuration.
<b>Contents</b>	<p>&lt;compare&gt;—Rollback number to compare.</p> <p>&lt;format&gt;—Output format of configuration (XML or text).</p> <ul style="list-style-type: none"> <li>■ text—Output text configuration.</li> <li>■ xml—Output XML configuration.</li> </ul> <p>&lt;rollback&gt;—Rollback number to display.</p>

## <get-route-engine-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-route-engine-information&gt;     &lt;slot&gt;slot&lt;/slot&gt;   &lt;/get-route-engine-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show Routing Engine status.
<b>Contents</b>	<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>*recv-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-rps-chassis-information>

---

- Usage**   <rpc>  
           <get-rps-chassis-information/>  
         </rpc>
- Description**   Show redundant power supply chassis information.

## <get-rps-led-information>

---

- Usage**   <rpc>  
           <get-rps-led-information/>  
         </rpc>
- Description**   Show Redundant Power Supply led information.

## <get-rps-power-supply-information>

---

- Usage**   <rpc>  
           <get-rps-power-supply-information/>  
         </rpc>
- Description**   Show Redundant Power Supply power supply information.



**<get-rps-status-information>**

---

**Usage**   <rpc>  
               **<get-rps-status-information/>**  
               </rpc>

**Description**   Show Redundant Power Supply status information.

**<get-rps-version-information>**

---

**Usage**   <rpc>  
               **<get-rps-version-information/>**  
               </rpc>

**Description**   Show Redundant Power Supply version information.

**<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-rtexport-instance-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance-name&gt;instance-name&lt;/instance-name&gt;   &lt;/get-rtexport-instance-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show instance configuration and runtime information.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;instance-name&gt;—Name of instance.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

**<get-rtexport-table-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-rtexport-table-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;table-name&gt;table-name&lt;/table-name&gt;   &lt;/get-rtexport-table-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show instance export information.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p> <p>&lt;table-name&gt;—Name of table.</p>



## <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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-accounting-aggregation-template-information&gt;     &lt;template-name&gt;template-name&lt;/template-name&gt;  &lt;!-- mandatory --&gt;     &lt;extensive/&gt;     &lt;detail/&gt;     &lt;terse/&gt;   &lt;/get-service-accounting-aggregation-template-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show aggregation type template.
<b>Contents</b>	<p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;template-name&gt;—Name of template.</p> <p>&lt;terse&gt;—Display terse output (default).</p>

**<get-service-accounting-errors-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-accounting-errors-information&gt;     &lt;error-information&gt;error-information&lt;/error-information&gt;   &lt;/get-service-accounting-errors-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show error statistics.
<b>Contents</b>	<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-accounting-status-information&gt;     &lt;status-information&gt;status-information&lt;/status-information&gt;   &lt;/get-service-accounting-status-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show service accounting parameters.
<b>Contents</b>	<status-information>—Name of service, wildcard, or 'all'.

**<get-service-accounting-usage-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-accounting-usage-information&gt;     &lt;usage-information&gt;usage-information&lt;/usage-information&gt;   &lt;/get-service-accounting-usage-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show CPU usage.
<b>Contents</b>	<usage-information>—Name of service, wildcard, or 'all'.

**<get-service-border-signaling-gateway-information-by-contact>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-border-signaling-gateway-information-by-contact&gt;     &lt;contact&gt;contact&lt;/contact&gt;    &lt;!-- mandatory --&gt;     &lt;brief/&gt;     &lt;summary/&gt;     &lt;detail/&gt;   &lt;/get-service-border-signaling-gateway-information-by-contact&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show border-signaling-gateway information by contact.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;contact&gt;—Contact.</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;summary&gt;—Display summary output.</p>



## <get-service-border-signaling-gateway-information-by-request-uri>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-border-signaling-gateway-information-by-request-uri&gt;     &lt;uri&gt;uri&lt;/uri&gt;    &lt;!-- mandatory --&gt;     &lt;brief/&gt;     &lt;summary/&gt;     &lt;detail/&gt;   &lt;/get-service-border-signaling-gateway-information-by-request-uri&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show border-signaling-gateway information by request uri.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;summary&gt;—Display summary output.</p> <p>&lt;uri&gt;—URI.</p>

## <get-service-border-signaling-gateway-statistics-calls>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-border-signaling-gateway-statistics-calls/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show border-signaling-gateway statistics calls.

## <get-service-border-signaling-gateway-statistics-calls-failed>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-border-signaling-gateway-statistics-calls-failed/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show border-signaling-gateway statistics for calls which failed.



## <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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-cos-statistics-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;summary/&gt;     &lt;service-set&gt;service-set&lt;/service-set&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-service-cos-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show statistics.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;interface&gt;—Name of adaptive services interface.</p> <p>&lt;service-set&gt;—Name of service set.</p> <p>&lt;summary&gt;—Display summary output.</p>

## <get-service-crtp-extensive-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-crtp-extensive-information&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-service-crtp-extensive-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show CRTP extensive output.
<b>Contents</b>	<interface>—Name of link services interface.

## <get-service-crtp-flow-table-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-crtp-flow-table-information&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-service-crtp-flow-table-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show CRTP flow table entries.
<b>Contents</b>	<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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-pgcp-statistics-gateway&gt;     &lt;gateway-name&gt;gateway-name&lt;/gateway-name&gt;    &lt;!-- mandatory --&gt;     &lt;brief/&gt;     &lt;extensive/&gt;   &lt;/get-service-pgcp-statistics-gateway&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show gateway statistics.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;gateway-name&gt;—Gateway name.</p>

## <get-service-pgcp-terminations>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-pgcp-terminations&gt;     &lt;gateway-name&gt;gateway-name&lt;/gateway-name&gt;    &lt;!-- mandatory --&gt;     &lt;termination-prefix&gt;termination-prefix&lt;/termination-prefix&gt;     &lt;h248/&gt;     &lt;brief/&gt;     &lt;count/&gt;   &lt;/get-service-pgcp-terminations&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show list of terminations.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;count&gt;—Show count of matching entries.</p> <p>&lt;gateway-name&gt;—Gateway name.</p> <p>&lt;h248&gt;—Display H248 output format.</p> <p>&lt;termination-prefix&gt;—Termination-prefix to use as filter, default * (all).</p>



## <get-service-set-cpu-statistics>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-set-cpu-statistics&gt;     &lt;service-set&gt;service-set&lt;/service-set&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-service-set-cpu-statistics&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show service interface CPU utilization as a percentage.
<b>Contents</b>	<p>&lt;interface&gt;—Name of adaptive services interface.</p> <p>&lt;service-set&gt;—Name of service set.</p>

## <get-service-set-memory-statistics>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-set-memory-statistics&gt;     &lt;service-set&gt;service-set&lt;/service-set&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-service-set-memory-statistics&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show service interface memory utilization.
<b>Contents</b>	<p>&lt;interface&gt;—Name of adaptive services interface.</p> <p>&lt;service-set&gt;—Name of service set.</p>

## <get-service-set-packet-drop-statistics>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-set-packet-drop-statistics&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-service-set-packet-drop-statistics&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show service set packet drop statistics.
<b>Contents</b>	<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-service-sfw-statistics-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;summary/&gt;     &lt;service-set&gt;service-set&lt;/service-set&gt;     &lt;interface&gt;interface&lt;/interface&gt;   &lt;/get-service-sfw-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show statistics.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;interface&gt;—Name of adaptive services interface.</p> <p>&lt;service-set&gt;—Name of service set.</p> <p>&lt;summary&gt;—Display summary output.</p>

**<get-services-dynamic-flow-capture-content-destination-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-services-dynamic-flow-capture-content-destination-information&gt;     &lt;terse/&gt;     &lt;capture-group&gt;capture-group&lt;/capture-group&gt;    &lt;!-- mandatory --&gt;     &lt;destination-identifier&gt;destination-identifier&lt;/destination-identifier&gt;    &lt;!-- mandatory --&gt;   &lt;/get-services-dynamic-flow-capture-content-destination-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show DFC content destination information.
<b>Contents</b>	<p>&lt;capture-group&gt;—Capture group name.</p> <p>&lt;destination-identifier&gt;—Content destination identifier.</p> <p>&lt;terse&gt;—Display terse output (default).</p>



**<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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-services-flow-collector-information&gt;     &lt;extensive/&gt;     &lt;detail/&gt;     &lt;terse/&gt;     &lt;interface&gt;interface-choice&lt;/interface&gt;    &lt;!-- mandatory --&gt;   &lt;/get-services-flow-collector-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show flow collector service information.
<b>Contents</b>	<p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;interface&gt;—Interface name.</p> <ul style="list-style-type: none"> <li>■ all—All configured Collector PICs.</li> <li>■ interface—Physical interface.</li> </ul> <p>&lt;terse&gt;—Display terse output (default).</p>

## <get-services-flow-collector-input-information>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-services-flow-collector-input-information&gt;     &lt;interface&gt;interface-choice&lt;/interface&gt;    &lt;!-- mandatory --&gt;     &lt;extensive/&gt;     &lt;detail/&gt;     &lt;terse/&gt;   &lt;/get-services-flow-collector-input-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show input status information.
<b>Contents</b>	<p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;interface&gt;—Interface name.</p> <ul style="list-style-type: none"> <li>■ all—All configured Collector PICs.</li> <li>■ interface—Physical interface.</li> </ul> <p>&lt;terse&gt;—Display terse output (default).</p>



**<get-services-ipsec-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-services-ipsec-statistics-information&gt;     &lt;remote-gw&gt;remote-gw&lt;/remote-gw&gt;     &lt;detail/&gt;     &lt;brief/&gt;     &lt;service-set&gt;service-set&lt;/service-set&gt;   &lt;/get-services-ipsec-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IPSec statistics.
<b>Contents</b>	<p>&lt;brief&gt;—Display accumulated statistics (default).</p> <p>&lt;detail&gt;—Display all tunnels.</p> <p>&lt;remote-gw&gt;—Peer address to use as filter.</p> <p>&lt;service-set&gt;—Name of service set.</p>

**<get-services-l2tp-radius-accounting-servers-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-services-l2tp-radius-accounting-servers-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show RADIUS accounting servers information.

**<get-services-l2tp-radius-accounting-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-services-l2tp-radius-accounting-statistics-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show RADIUS accounting statistics information.

**<get-services-l2tp-radius-authentication-accounting-servers-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-services-l2tp-radius-authentication-accounting-servers-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-services-security-associations-information&gt;     &lt;brief/&gt;     &lt;detail/&gt;     &lt;extensive/&gt;     &lt;service-set&gt;service-set&lt;/service-set&gt;   &lt;/get-services-security-associations-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show IPSec security association information.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;extensive&gt;—Display extensive output.</p> <p>&lt;service-set&gt;—Restrict output to one service set.</p>

**<get-sfm-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-sfm-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show Switching and Forwarding Module status.

**<get-show-bridge-domain-all-ce-flood-route-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-show-bridge-domain-all-ce-flood-route-information&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;bridge-domain&gt;bridge-domain&lt;/bridge-domain&gt;   &lt;/get-show-bridge-domain-all-ce-flood-route-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show route for flooding traffic to all CE routers if no-local-switching is enabled.
<b>Contents</b>	<p>&lt;bridge-domain&gt;—Display information for a specified bridge domain.</p> <p>&lt;instance&gt;—Display information for a specified instance.</p>



**<get-show-bridge-domain-ve-flood-route-information>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-show-bridge-domain-ve-flood-route-information&gt;     &lt;instance&gt;instance&lt;/instance&gt;     &lt;bridge-domain&gt;bridge-domain&lt;/bridge-domain&gt;   &lt;/get-show-bridge-domain-ve-flood-route-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show route for flooding traffic to all VE routers if no-local-switching is enabled.
<b>Contents</b>	<p>&lt;bridge-domain&gt;—Display information for a specified bridge domain.</p> <p>&lt;instance&gt;—Display information for a specified instance.</p>

**<get-sib-information>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-sib-information/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show Switch Interface Board status.

**<get-snapshot-information>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-snapshot-information&gt;     &lt;media&gt;media-choice&lt;/media&gt;   &lt;/get-snapshot-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show snapshot information.
<b>Contents</b>	<p>&lt;media&gt;—Media to show snapshot information from.</p> <ul style="list-style-type: none"> <li>■ compact-flash—Show snapshot information from compact flash.</li> <li>■ disk—Show snapshot information from hard disk.</li> <li>■ removable-compact-flash—Show snapshot information from removable compact flash.</li> <li>■ usb—Show snapshot information from device connected to USB port.</li> </ul>

**<get-snmp-inform-statistics>**

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-snmp-inform-statistics/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-source-class-statistics&gt;     &lt;class-name&gt;class-name&lt;/class-name&gt;    &lt;!-- mandatory --&gt;     &lt;interface-name&gt;interface-name&lt;/interface-name&gt;   &lt;/get-source-class-statistics&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show statistics for source class.
<b>Contents</b>	<p>&lt;class-name&gt;—Name of source class.</p> <p>&lt;interface-name&gt;—Name of logical interface.</p>

**<get-spmb-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-spmb-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show Switch Processor Mezzanine Board status.

**<get-spmb-sib-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-spmb-sib-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show Switch Interface Board status.

**<get-ssb-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ssb-information&gt;     &lt;slot&gt;slot&lt;/slot&gt;   &lt;/get-ssb-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show System and Switch Board status.
<b>Contents</b>	<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 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 subscriber 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>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-syslog-tag-information&gt;     &lt;syslog-tag&gt;syslog-tag&lt;/syslog-tag&gt;   &lt;/get-syslog-tag-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	System log error messages.
<b>Contents</b>	<syslog-tag>—System log tag or regular expression.

## <get-system-alarm-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-system-alarm-information/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show system alarm status.

## <get-system-archival>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-system-archival/&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	List files queued up for archive transfer.

## <get-system-firmware-information>

---

<b>Usage</b>	<pre>&lt;rpc&gt;   &lt;get-system-firmware-information&gt;     &lt;compatibility/&gt;   &lt;/get-system-firmware-information&gt; &lt;/rpc&gt;</pre>
<b>Description</b>	Show all firmware version information.
<b>Contents</b>	<compatibility>—Show all firmware compatibility information.



**<get-system-resource-cleanup-processes-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-system-resource-cleanup-processes-information&gt;     &lt;detail/&gt;     &lt;process-name&gt;process-name&lt;/process-name&gt;     &lt;pid&gt;pid&lt;/pid&gt;   &lt;/get-system-resource-cleanup-processes-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show process resource cleanup information.
<b>Contents</b>	<p>&lt;detail&gt;—Display detailed information.</p> <p>&lt;pid&gt;—Process identifier.</p> <p>&lt;process-name&gt;—Process name.</p>

**<get-system-storage>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-system-storage&gt;     &lt;detail/&gt;   &lt;/get-system-storage&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show local storage data.
<b>Contents</b>	<detail>—No documentation is available yet.

**<get-system-uptime-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-system-uptime-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show time since system and processes started.

**<get-system-users-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-system-users-information&gt;     &lt;no-resolve/&gt;   &lt;/get-system-users-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show users who are currently logged in.
<b>Contents</b>	<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-ted-protocol-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;brief/&gt;     &lt;detail/&gt;   &lt;/get-ted-protocol-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show current contributing protocols.
<b>Contents</b>	<p>&lt;brief&gt;—Display brief output (default).</p> <p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;logical-system&gt;—Name of logical system, or 'all'.</p>

**<get-temperature-threshold-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-temperature-threshold-information/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show chassis temperature threshold settings.

**<get-uri-redirect-set-statistics-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-uri-redirect-set-statistics-information&gt;     &lt;detail/&gt;   &lt;/get-uri-redirect-set-statistics-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show URI redirect set statistics.
<b>Contents</b>	<detail>—Display detailed statistics.



**<get-vcpu-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-vcpu-information&gt;     &lt;detail/&gt;     &lt;slot&gt;slot&lt;/slot&gt;   &lt;/get-vcpu-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show Visibility CPU status.
<b>Contents</b>	<p>&lt;detail&gt;—Display detailed output.</p> <p>&lt;slot&gt;—VCPU slot number.</p>

**<get-vpls-all-ce-flood-route-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-vpls-all-ce-flood-route-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;    &lt;!-- mandatory --&gt;   &lt;/get-vpls-all-ce-flood-route-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show route for flooding traffic to all CE routers.
<b>Contents</b>	<p>&lt;instance&gt;—Display information for a specified vpls.</p> <p>&lt;logical-system&gt;—Name of logical system.</p>

**<get-vpls-all-flood-route-information>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;get-vpls-all-flood-route-information&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;     &lt;instance&gt;instance&lt;/instance&gt;    &lt;!-- mandatory --&gt;   &lt;/get-vpls-all-flood-route-information&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Show route for flooding traffic from customer edge router.
<b>Contents</b>	<p>&lt;instance&gt;—Display information for a specified vpls.</p> <p>&lt;logical-system&gt;—Name of logical system.</p>



**<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'.

**<network-services>**

---

**Usage**   <rpc>  
           **<network-services/>**  
         </rpc>

**Description**   Show chassis network services.

**<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-appid-application-package-download>

**Usage**   <rpc>  
               <request-appid-application-package-download/>  
               </rpc>

**Description**   Download application package.



**<request-appid-application-package-download-version>**

---

**Usage**   <rpc>  
           **<request-appid-application-package-download-version>**  
           <version-value>version-value</version-value>   <!-- mandatory -->  
           **</request-appid-application-package-download-version>**  
           </rpc>

**Description**   Version of application package to download.

**Contents**   <version-value>—Version number (1 - 65535).

**<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-ggsn-start-msisdn-trace&gt;     &lt;msisdn-identifier&gt;<i>msisdn-identifier</i>&lt;/msisdn-identifier&gt;    &lt;!-- mandatory --&gt;   &lt;/request-ggsn-start-msisdn-trace&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Start tracing Mobile Station Integrated Services Digital Network.
<b>Contents</b>	<msisdn-identifier>—Identifier for MSISDN.

**<request-ggsn-stop-imsi-trace>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-ggsn-stop-imsi-trace&gt;     &lt;imsi-identifier&gt;<i>imsi-identifier</i>&lt;/imsi-identifier&gt;    &lt;!-- mandatory --&gt;   &lt;/request-ggsn-stop-imsi-trace&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Stop tracing International Mobile Subscriber Identity.
<b>Contents</b>	<imsi-identifier>—Identifier for IMSI.

**<request-ggsn-stop-interface>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-ggsn-stop-interface&gt;     &lt;interface-name&gt;<i>interface-name</i>&lt;/interface-name&gt;    &lt;!-- mandatory --&gt;   &lt;/request-ggsn-stop-interface&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Stop GGSN service interface.
<b>Contents</b>	<interface-name>—Name of GGSN service interface.

**<request-ggsn-stop-msisdn-trace>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-ggsn-stop-msisdn-trace&gt;     &lt;msisdn-identifier&gt;<i>msisdn-identifier</i>&lt;/msisdn-identifier&gt;    &lt;!-- mandatory --&gt;   &lt;/request-ggsn-stop-msisdn-trace&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Stop tracing Mobile Station Integrated Services Digital Network.
<b>Contents</b>	<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-idp-security-package-download>

---

- Usage** <rpc>  
     <request-idp-security-package-download>  
         <full-update/>  
         <check-server/>  
         <policy-templates/>  
         <precompiled-policy/>  
         <status/>  
     </request-idp-security-package-download>  
 </rpc>
- Description** Download security package (Package includes detector and deltas for attack table).
- Contents** <check-server>—Retrieve version information for latest package on server.
- <full-update>—Download package with complete attack table.
- <policy-templates>—Download policy templates.
- <precompiled-policy>—Download pre-compiled 'Recommended' policy and detector for it.
- <status>—Retrieve the status of security package download operation.

## <request-idp-security-package-download-version>

---

- Usage** <rpc>  
     <request-idp-security-package-download-version>  
         <version-value>version-value</version-value>   <!-- mandatory -->  
         <full-update/>  
     </request-idp-security-package-download-version>  
 </rpc>
- Description** Version of package to download.
- Contents** <full-update>—Download package with complete attack table.
- <version-value>—Version number.



**<request-idp-security-package-install>**

---

**Usage** <rpc>  
     **<request-idp-security-package-install>**  
         <update-attack-database-only/>  
         <policy-templates/>  
         <precompiled-policy/>  
         <older-detector/>  
         <status/>  
     **</request-idp-security-package-install>**  
 </rpc>

**Description** Update attack database, active policy, detector with new package.

**Contents** <older-detector>—Update dataplane with older detector.

<policy-templates>—Update previously installed policy-templates with newly downloaded ones.

<precompiled-policy>—Update dataplane 'Recommended' policy and detector for it with newly downloaded ones.

<status>—Retrieve the status of security package load operation.

<update-attack-database-only>—Don't update/push active policy or detector to data plane.

**<request-idp-security-package-load>**

---

**Usage** <rpc>  
     **<request-idp-security-package-load>**  
         <policy>*policy*</policy>  
         <no-ai/>  
         <detector>*detector*</detector>  
     **</request-idp-security-package-load>**  
 </rpc>

**Description** Load a compiled policy.

**Contents** <detector>—Detector file name.

<no-ai>—Application identification flag.

<policy>—Compiled policy file name.



**<request-idp-ssl-key-add>**

---

**Usage**   <rpc>  
           **<request-idp-ssl-key-add>**  
           <key-name>key-name</key-name>   <!-- mandatory -->  
           <file>file</file>  
           <password>password</password>  
           <server>server</server>  
           **</request-idp-ssl-key-add>**  
         </rpc>

**Description**   Add SSL key and server.

**Contents**   <file>—Key file.

              <key-name>—Key name.

              <password>—Password used to encrypt private key.

              <server>—Server IP address.

**<request-idp-ssl-key-delete>**

---

**Usage**   <rpc>  
           **<request-idp-ssl-key-delete>**  
           <key-name>key-name</key-name>  
           <server>server</server>  
           **</request-idp-ssl-key-delete>**  
         </rpc>

**Description**   Delete SSL keys.

**Contents**   <key-name>—Key name.

              <server>—Server IP address.

**<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>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-package-delete&gt;     &lt;force/&gt;     &lt;package-name&gt;package-name&lt;/package-name&gt;    &lt;!-- mandatory --&gt;   &lt;/request-package-delete&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Remove extension or upgrade package.
<b>Contents</b>	<p>&lt;force&gt;—Force removal of package (ignore warnings).</p> <p>&lt;package-name&gt;—Name of package.</p>

**<request-package-delete-backup>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-package-delete-backup/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Delete old system software packages.

**<request-package-in-service-upgrade>**

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-package-in-service-upgrade&gt;     &lt;reboot/&gt;     &lt;package-name&gt;package-name&lt;/package-name&gt;    &lt;!-- mandatory --&gt;     &lt;no-old-master-upgrade/&gt;     &lt;no-copy/&gt;     &lt;unlink/&gt;   &lt;/request-package-in-service-upgrade&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	In-service software upgrade.
<b>Contents</b>	<p>&lt;no-copy&gt;—Don't save copies of package files.</p> <p>&lt;no-old-master-upgrade&gt;—Don't upgrade the old master after switchover.</p> <p>&lt;package-name&gt;—URL or pathname of package.</p> <p>&lt;reboot&gt;—Reboot system after adding package.</p> <p>&lt;unlink&gt;—Remove the package after successful installation.</p>



**<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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-scripts-package-add&gt;     &lt;no-copy/&gt;     &lt;unlink/&gt;     &lt;package-name&gt;package-name&lt;/package-name&gt;    &lt;!-- mandatory --&gt;     &lt;scs/&gt;     &lt;lcc&gt;lcc&lt;/lcc&gt;     &lt;member&gt;member&lt;/member&gt;     &lt;dont-forward/&gt;   &lt;/request-scripts-package-add&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Add or upgrade jais package.
<b>Contents</b>	<p>&lt;dont-forward&gt;—No documentation is available yet.</p> <p>&lt;lcc&gt;—Install package on an LCC.</p> <p>&lt;member&gt;—Install package on VC Member.</p> <p>&lt;no-copy&gt;—Don't save copy of jais package file.</p> <p>&lt;package-name&gt;—URL or pathname of package.</p> <p>&lt;scs&gt;—Install package on SCC.</p> <p>&lt;unlink&gt;—Remove the package after successful installation.</p>

## <request-scripts-package-delete>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-scripts-package-delete/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Remove jais package.

## <request-scripts-package-rollback>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-scripts-package-rollback/&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	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.
- disk—Write snapshot to hard disk.
- 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>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-snmp-spoof-trap&gt;     &lt;trap&gt;trap&lt;/trap&gt;    &lt;!-- mandatory --&gt;     &lt;variable-bindings&gt;variable-bindings&lt;/variable-bindings&gt;   &lt;/request-snmp-spoof-trap&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Generate artificial SNMP notification.
<b>Contents</b>	<p>&lt;trap&gt;—The name of the trap to spoof.</p> <p>&lt;variable-bindings&gt;—The list of variables &amp; values to include in the trap.</p>

## <request-system-storage-cleanup>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;request-system-storage-cleanup&gt;     &lt;dry-run/&gt;   &lt;/request-system-storage-cleanup&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Clean up temporary files and rotate logs.
<b>Contents</b>	<dry-run>—Only list the cleanup candidates, do not remove them.

## <set-logical-router>

---

<b>Usage</b>	<pre> &lt;rpc&gt;   &lt;set-logical-router&gt;     &lt;logical-system&gt;logical-system&lt;/logical-system&gt;    &lt;!-- mandatory --&gt;   &lt;/set-logical-router&gt; &lt;/rpc&gt; </pre>
<b>Description</b>	Set default logical system.
<b>Contents</b>	<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.